

# REPORT OF THE REGISTRAR-GENERAL ON AGRICULTURAL AND PASTORAL STATISTICS FOR 1902.

Presented to both Houses of Parliament by Command.

## TO THE UNDER SECRETARY TO THE TREASURY.

SIR,—I have the honour to present my Annual Report on the Agricultural and Pastoral Statistics of the State for the past year, which I have endeavoured to make as comprehensive and complete as possible. The information with respect to the more important interests has already been published in pamphlet form, and issued to such members of the public as might be considered especially interested therein.

### LIVE STOCK.

Although the prognostications of my last Report have been borne out, and the effects of the last year of the series of dry seasons have been most disastrous, yet with the drought, to a large extent at least, broken up, and the prospects offering of more favourable weather, this Report can be written tempered by a spirit of hope for the future.

Compared with 1901, every description of live stock shows a diminution in number, the decrease in both cattle and sheep being very serious—that of the former being four times, and of the latter nine times, what it was in the previous year.

The numbers of different kinds of live stock in the State on the 31st December last were as follow:—

#### A.

Year.		Horses.	Horned Cattle.	Sheep.	Pigs.
1901	...	462,119	3,772,707	10,030,971	121,641
1902	...	399,122	2,543,471	7,213,985	77,202
Numerical Increase in 1902		...	...	...	...
Numerical Decrease in 1902		62,997	1,229,236	2,816,986	44,439
Centesimal Increase in 1902		...	...	...	...
Centesimal Decrease in 1902		13·63	32·58	28·08	36·53

There was, therefore, a decrease in horses of 62,997, or 13.63 per cent. on the figures for 1901; in cattle of 1,229,236, or 32.58 per cent.; in sheep of 2,816,986, or 28.08 per cent.; and of pigs 44,439, or 36.53 per cent., thus leaving in Queensland at the beginning of the present year 399,122 horses, 2,543,471 cattle, 7,213,985 sheep, and 77,202 pigs. It would, of course, be incorrect to assume that the whole of the decrease was caused by losses due to drought, as large numbers are annually required by the butchers for home consumption, besides which many cattle and sheep were put to profit at the various establishments engaged in slaughtering and preserving live stock, chiefly for export. There were about 177,000 more sheep thus utilised last year than in 1901, although the number of cattle thus disposed of was about 14,000 fewer. Such owners as have been fortunate enough to save a material proportion of their stock are, to some extent, compensated by the greatly enhanced value of those that remain, but this certainly in no way recoups the loss in productive power to the State in the output of wool and meat.

From the following table, which covers a period of ten years, the full effects of the past dry seasons on the live stock can be seen:—

#### A a.

SHOWING the NUMBER of HORSES, CATTLE, SHEEP, and PIGS, in the STATE—RETURN for TEN YEARS.

Year.		Horses.	Cattle.	Sheep.	Pigs.
1893	...	429,734	6,693,200	18,697,015	68,086
1894	...	444,109	7,012,997	19,587,691	89,677
1895	...	468,743	6,822,401	19,856,959	100,747
1896	...	452,207	6,507,377	19,593,696	97,434
1897	...	479,280	6,089,013	17,797,883	110,855
1898	...	480,469	5,571,292	17,552,608	127,081
1899	...	479,127	5,053,836	15,226,479	139,118
1900	...	456,788	4,078,191	10,339,185	122,187
1901	...	462,119	3,772,707	10,030,971	121,641
1902	...	399,122	2,543,471	7,213,985	77,202

A small decrease during the ten years in the number of horses is immaterial, as those remaining are more than sufficient for the needs of the State, and the foreign markets are limited in the extreme. Cattle have decreased from 7,000,000 in 1894 to but little more than one-third of that number. There were, during the eight years 1895-1902, some 2,160,000 cattle slaughtered, chiefly for export, about 1,100,000 exported alive in excess of imports, besides about 1,800,000 taken to the shambles for home consumption, or in all 5,060,000, an annual average of 632,500 put to profit.

The cast of the 7,000,000, with favourable seasons, would amply have provided for this, and have left a large margin either for increase in number or for expansion of the export trade. The loss of cattle has also seriously affected the dairying industry, the products of which had assumed considerable importance in the export market during the past few years. The collateral industry of pig-raising, which is so largely dependent for its support on the by-products of dairying, also further reflects the losses; the number of pigs having decreased from 121,641 in 1901 to 77,202 in 1902, whilst in 1893, or ten years ago, they numbered 68,086.

The annual centesimal increase or decrease in the different kinds of live stock for the past ten years is shown in the following table:—

#### A.b.

	Year.	Horses.	Cattle.	Sheep.	Pigs.
1893	...	1·65	1·54	— 13·87	— 41·77
1894	...	3·35	4·78	4·76	31·71
1895	...	5·55	— 2·72	1·37	12·34
1896	...	— 3·53	— 4·63	— 1·33	— 3·29
1897	...	5·99	6·43	9·17	13·77
1898	...	0·25	8·50	1·38	14·64
1899	...	— 0·28	— 9·29	— 13·25	9·47
1900	...	— 4·66	— 19·31	— 32·10	— 12·17
1901	...	1·17	— 7·49	— 2·98	— 0·45
1902	...	— 13·63	— 32·58	— 28·08	— 36·53

— Decrease.

The preponderance of the minus sign is very noticeable; with regard to horses only has there been an excess of years of increase. In cattle there have been decreases for eight consecutive years, culminating in a centesimal decrease in 1902 of 33 per cent. on the figures for 1901. Sheep also decreased during eight years of the ten, although seven only were consecutive ones, and the decrease of 28 per cent. recorded in 1902 was exceeded by that of 32 per cent. in 1900. The decrease in pigs of 37 per cent. was not so great as that experienced in 1893, when it amounted to 42 per cent., which was, however, followed in 1894 by an increase of 32 per cent.

The demand for horses, which hardened during the African war, 11,069 being exported to that continent during 1901, had not yet reverted to its normal position, although the conditions considerably modified; the imports and exports for 1902 being as follow:—

#### A.c.

##### HORSES IMPORTED during 1902.

		Number.	Value.
			£
<i>Seawards—</i>			
United Kingdom	...	4	880
New South Wales	...	131	6,688
Victoria	...	8	570
India	...	2	500
Arabia	...	1	200
		146	8,838
<i>Borderwise—</i>			
New South Wales	...	494	8,487
South Australia	...	252	1,596
Total	...	892	18,921

##### HORSES EXPORTED during 1902.

		Number.	Value.
			£
<i>Seawards—</i>			
New South Wales	...	155	11,397
Victoria	...	10	294
South Australia	...	1	27
Tasmania	...	1	6
Cape Colony	...	1,778	16,414
Natal	...	2,327	19,764
India	...	2,928	27,848
Singapore	...	1	90
		7,201	75,840
<i>Borderwise—</i>			
New South Wales	...	1,955	13,760
South Australia	...	116	818
Total	...	9,272	90,418

Taking exports first, as the more important side of the question, instead of 17,039 horses, of a value of £160,930, exported in 1901, in the following year only 9,272 horses, of a value of £90,418, were sent out of the State; of the latter, 4,105 went to Africa, or but little more than a third of the number sent there in 1901. The Indian market demanded rather a larger number in 1902 than in the previous year—namely, 2,928, against 2,207, or 721 more. The average value of horses exported were: 1901—total £9 8s. 11d., Africa £8 15s., India £11 14s. 6d.; 1902—total £9 15s., Africa £8 16s. 3d., India £9 10s. 3d.

These prices seem very low for a type of horse worth the cost of a sea voyage, and although doubtless those sent to Africa were not of first quality, and, indeed, horses of that class were not required, still the style of animal generally considered as essential to meet the demands of the Indian market are surely worth more than £10 per head at the port of embarkation.

Imports are chiefly borderwise, and consist almost entirely of horses forming part of drovers' outfit, and are greatly more than counterbalanced by the export of animals under precisely similar conditions. The train, of course, carries both ways a certain number of valuable animals, racers or stud horses, moving from one State to the other.

#### DISTRIBUTION OF LIVE STOCK.

A comparison of the numbers of stock depastured in each financial division of the State during the past two years is afforded by the following table:—

#### A d.

Division.	Year.	Horses.	Cattle.	Sheep.	Pigs.
SOUTHERN	1901	211,068	1,543,804	4,686,349	97,745
	1902	181,115	950,575	3,084,701	60,679
Numerical Increase in 1902	...	...	...	...	...
Numerical Decrease in 1902	...	29,953	593,229	1,601,648	37,066
Centesimal Increase in 1902	...	...	...	...	...
Centesimal Decrease in 1902	...	14·19	38·43	34·18	37·92
CENTRAL	1901	102,993	766,735	3,305,087	8,612
	1902	79,780	336,405	2,307,992	5,384
Numerical Increase in 1902	...	...	...	...	...
Numerical Decrease in 1902	...	23,213	430,330	997,095	3,228
Centesimal Increase in 1902	...	...	...	...	...
Centesimal Decrease in 1902	...	22·54	56·12	30·17	37·48
NORTHERN	1901	148,058	1,462,168	2,039,535	15,284
	1902	138,227	1,256,491	1,821,292	11,139
Numerical Increase in 1902	...	...	...	...	...
Numerical Decrease in 1902	...	9,831	205,677	218,243	4,145
Centesimal Increase in 1902	...	...	...	...	...
Centesimal Decrease in 1902	...	6·64	14·06	10·70	27·12

From this will be seen that decreases were experienced everywhere, although the Northern division did not suffer nearly as severely during 1902 as the Southern and Central, either actually or relatively.

**HORSES.**—There were on 31st December last 181,115, or 45 per cent. of all horses in the State, depastured in the Southern division. This was 29,953 fewer than in the previous year, the loss for the period being 14 per cent. In the Central division there were in 1902, 79,780, showing a loss on the figures of the previous year of 23,213, or 23 per cent. There were last year 138,227 horses in the Northern division, where the decrease amounted to 7 per cent. only—namely, 9,831.

**CATTLE.**—One-half—1,256,491—of all cattle in Queensland were returned in the Northern division; 950,575, or 37 per cent., in the Southern; and 336,405, or 13 per cent., in the Central division. The decreases, both actual and relative, were:—Northern, 205,677, or 14.06 per cent.; Southern, 593,229, or 38.43 per cent.; and Central, 430,330, or 56.12 per cent.

**SHEEP.**—Of the 7,213,985 in the State at the end of 1902, 3,084,701, or 43 per cent., were in the Southern; 2,307,992, or 32 per cent., in the Central; and 1,821,292, or 25 per cent., in the Northern division. The losses experienced, both numerical and centesimal, were in the same order, those with the greatest numbers suffering most severely; they were respectively as follow:—Southern, 1,601,648, and 34.18; Central, 997,095, and 30.17; Northern, 218,243, and 10.70.

**PIGS.**—Pig-breeding is chiefly confined to the Southern division, 60,679, or 79 per cent., of all pigs being found there, although the ratio of decrease was practically as great among the few in the Central, and was considerable, although less, in the North. In the South there was a decrease of 38 per cent., or 37,066. Of course, pigs increase with great rapidity, and with an ample food supply these numbers would soon be made good.

Since this Report was sent to the printer an outbreak of swine fever has taken place, having been introduced by some hogs imported from New South Wales. The gravity of the situation being fully realized by the Chief Inspector of Stock, prompt measures to stamp it out have been adopted, which appear likely to prove efficacious, and no doubt at an early date the danger will have been overcome, if indeed it has not been so already, although it is recognised that even if no fresh outbreak occurs, the contagious area will require close supervision for some time.

Fuller details as to distribution on the 31st December last can be ascertained by reference to the tables in the Appendix, Nos. I. to VI. inclusive. Owing to the disturbance with respect to the location of stock, particularly sheep, in consequence of removals from their usual habitat to other places for pasture, the condition obtaining at the end of last year would fail to give a true idea as to the habitual disposal of stock in normal seasons, consequently there is nothing to be gained by further dilating upon the conditions existing, but as in most cases the stock travelled towards the coast, the numbers shown in each division would not be affected to the extent that individual districts would be. Stock that have survived have, as a result of recent rains, been in many instances returned to the stations to which they belong.

#### IMPORTS AND EXPORTS—CATTLE AND SHEEP.

Information as to imports and exports of cattle and sheep for the past ten years is furnished by the following table:—

Ae.

Year.	Horned Cattle.			Sheep.	
	Inwards.		Outwards.	Inwards.	Outwards.
1893 ...	7,003		183,663	223,655	1,016,945
1894 ...	2,286		135,858	156,596	430,646
1895 ...	5,590		80,620	186,007	295,032
1896 ...	10,127		272,622	94,620	899,720
1897 ...	13,197		176,329	289,768	1,114,270
1898 ...	13,867		194,648	158,843	641,177
1899 ...	16,972		205,243	200,523	463,276
1900 ...	9,370		69,979	103,967	487,934
1901 ...	32,439		74,066	297,628	277,738
1902 ...	11,593		35,299	193,243	140,030

CATTLE.—During 1902, imports were about one-third and exports about one-half the number for 1901; but the latter exceeded the former by more than three times its own volume. When there was a large number of cattle in Queensland the export borderwise to the other States was one of the most important outlets for the disposal of this State's surplus stock; during the past three years the trade has of necessity shrunk to very small proportions. The regulations controlling the entry of live stock into New South Wales, intended to prevent the introduction of ticks, no doubt also operates as a deterrent.

SHEEP.—There were 193,243 which entered the State during 1902, or 104,385 less than in 1901, when 297,628 were imported. Those exported numbered 140,030, and thus fell short of the imports by 53,213, and were exceeded by the exports for 1901, which numbered 277,738, by 137,708.

#### SIZE OF HERDS.

Although cattle depastured on large holdings are not so frequently broken up into smaller mobs to travel for feed as are sheep, yet the diminution in the number of large herds has been greater with the former than even with the latter. There were only four districts in 1902 in which over 100,000 head of cattle were depastured.

The following table gives information as to the numbers of cattle returned in herds of various sizes as grouped:—

Af.

Petty Sessions District.	Owners.	1 to 100.	Owners.	101 to 300.	Owners.	301 and upwards.	Total Owners.	Total Cattle.
Burke ...	9	208	2	385	20	147,995	31	148,588
Cloncurry ...	24	821	4	682	13	111,665	41	113,168
Hughenden ...	93	2,372	10	1,763	23	119,204	126	123,339
Norman ...	12	242	3	600	26	241,068	41	241,910
All other Districts ...	22,362	362,464	953	172,930	845	1,381,072	24,160	1,916,466
Totals ...	22,500	366,107	972	176,360	927	2,001,004	24,399	2,543,471

Of the 2,543,471 cattle in Queensland, 2,001,004, or 79 per cent., were held in 927 herds of over 300 head each, and 176,360, or 7 per cent., were divided amongst 972 holders in herds between 100 and 300 head. There were 241,910 cattle in the Norman petty sessions district, the next largest number being in Burke, 148,588. In normal seasons these districts practically pasture nothing but cattle, and although last year there were more sheep found there than usual, still the number was very limited.

Cattle are, naturally, much more widely diffused than sheep, with respect to both ownership and location, so that, while possessors of sheep numbered just over 2,000 only, there were 24,399 persons who were in possession of cattle to a larger or smaller extent.

#### SIZE OF FLOCKS.

The disturbance in the distribution of live stock brought about by the drought, to which allusion has already been made, resulted in sheep being returned in smaller flocks. Where, in normal years, the sheep would be collected on one large station, and returned on one schedule by their hundreds of thousands, during dry seasons they are scattered in comparatively small flocks throughout the State,

and the drover in charge for the time being figures as an owner, and the return of each flock is made separately. The following table shows the numbers of sheep that were returned under each size of flock grouped as in previous years:—

## A g.

Petty Sessions Districts.	50 and Under.		51 to 1,000.		1,001 to 5,000.		5,001 to 20,000.		20,001 and Upwards.		Totals.	
	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Total Owners.	Total Sheep.
Adavale ... ...	1	30	1	60	1	1,084	3	23,840	3	145,915	9	170,929
Augathella ... ...	3	83	4	1,400	4	9,234	...	...	2	97,589	13	108,306
Barcaldine ... ...	9	129	16	4,871	15	44,143	7	55,626	5	213,256	52	318,025
Blackall ... ...	5	82	5	3,176	12	33,060	6	58,567	5	178,871	33	273,756
Bollon ... ...	2	11	3	659	11	34,369	12	148,293	1	57,335	29	240,667
Boulia ... ...	1	3	...	...	...	...	...	...	3	101,815	4	101,818
Charleville ... ...	10	153	13	4,842	10	25,066	4	56,471	1	39,000	38	125,532
Clermont ... ...	20	259	7	2,580	1	2,000	7	82,815	1	25,000	36	112,754
Cloncurry ... ...	4	13	1	200	1	3,300	2	22,310	8	364,106	16	389,929
Cunnamulla ... ...	3	29	19	18,067	44	95,183	11	112,520	7	263,827	84	491,626
Dalby ... ...	32	588	97	41,854	30	48,491	10	114,212	1	32,667	170	237,812
Hughenden ... ...	9	86	5	3,088	36	108,148	22	234,140	8	339,653	80	685,115
Isisford ... ...	3	59	6	1,468	2	4,329	8	102,227	3	193,832	22	301,915
Longreach ... ...	9	144	15	7,850	29	73,359	18	158,122	8	423,103	79	662,578
Muttaburra ... ...	1	20	6	2,230	11	28,120	9	87,941	6	166,510	33	284,821
St. George ... ...	4	138	11	3,604	21	55,526	8	92,802	3	137,051	47	289,121
Tambo ... ...	2	56	5	2,817	5	15,880	6	52,371	3	102,938	21	174,062
Thargomindah ... ...	1	4	3	1,900	2	4,100	5	47,725	2	50,698	13	104,427
Toowoomba ... ...	37	912	114	39,903	23	57,046	5	56,338	3	103,967	182	258,166
Warwick ... ...	14	344	47	17,264	14	35,390	3	25,976	1	24,669	79	103,643
Windorah ... ...	2	29	11	4,874	4	10,999	9	82,302	4	118,300	30	216,504
Winton ... ...	7	100	6	1,982	9	33,278	10	92,507	8	316,371	40	444,238
All other Districts	443	7,408	323	102,272	113	247,255	58	611,612	5	149,694	942	1,118,241
Totals ... ...	622	10,780	718	266,961	398	969,360	223	2,318,717	91	3,648,167	2,052	7,213,985

Districts containing 100,000 are shown individually; in 1901 this brought 27 districts by name into the table. In 1902 there are only 22 so represented; the 5 districts falling below standard being Goondiwindi, Mitchell, Roma, Springsure, and Surat. In only 91 instances were flocks exceeding 20,000 returned on the schedules in 1902, against 132 in the previous year. The aggregate of these 91 flocks was 3,648,167, against 6,180,008 for the 132 in 1901. Flocks numbering from 5,000 to 20,000 reduced only slightly during the year; they numbered 223, or 7 less than in 1901, and aggregated 2,318,717 sheep, or 95,270 fewer than in the preceding year.

The number of individual returns of sheep depastured, and the average number of sheep to each, for the past ten years, were as follow:—

## A h.

Year.	No. of Owners.	No. of Sheep.	Average Size of Flocks.
1893 ... ...	1,440	18,697,015	12,984
1894 ... ...	1,584	19,587,691	12,366
1895 ... ...	1,637	19,856,959	12,130
1896 ... ...	1,664	19,593,696	11,775
1897 ... ...	1,793	17,797,883	9,926
1898 ... ...	1,835	17,552,608	9,565
1899 ... ...	1,897	15,226,479	8,027
1900 ... ...	1,950	10,339,185	5,302
1901 ... ...	2,018	10,030,971	4,970
1902 ... ...	2,052	7,213,985	3,516

The 21,708,310 sheep in Queensland in 1892 were held in 1,496 flocks, numbering 14,511 each; last year the flocks numbered 2,052, an average of 3,516 each.

The following table shows in each of the three great divisions of the State the number of each kind of live stock to each square mile of land, and to each head of the population:—

## A i.

In converting Horses and Cattle to terms of Sheep, ten head of sheep are taken as equal to one horse or head of cattle.

	Southern Division.		Central Division.		Northern Division.		State.	
	Square Mile.	Per Capita of Population.	Square Mile.	Per Capita of Population.	Square Mile.	Per Capita of Population.	Square Mile.	Per Capita of Population.
Horses ... ...	0.87	0.54	0.54	1.22	0.45	1.22	0.60	0.78
Cattle ... ...	4.54	2.83	2.26	5.15	4.05	11.08	3.80	4.94
Sheep ... ...	14.73	9.18	15.53	35.30	5.87	16.06	10.79	14.01
All kinds in terms of Sheep	68.79	42.86	43.52	98.95	50.78	139.01	54.81	71.17
Pigs ... ...	...	0.18	...	0.08	...	0.10	...	0.15
All kinds, including pigs, in terms of Sheep ... ...	...	43.04	...	99.03	...	139.11	...	71.32

For convenience of comparison a total line is shown, in which the various kinds of live stock are brought to one denomination, sheep being the term to which they are all reduced, the larger kinds of stock being assumed to require ten times the grazing capacity of the smaller. It will be seen that throughout Queensland there were last year 55 sheep, or their equivalent, to each square mile; the number for 1901 was 78. They were distributed as follows:—69 to each square mile in the Southern division, 44 in the Central, and 51 in the Northern; the corresponding figures for 1901 were 106, 81, and 58 respectively. The number of sheep to each square mile was about equal in the South and Central, being in both instances nearly three times as great as in the North; on the other hand, with respect to cattle, there were twice as many to each square mile in the South and North as there were in the Central.

The numbers of all live stock in terms of sheep in relation to population were, for the whole State, 71.32 per capita, in which were comprised 4.9 cattle=49 sheep and 14 sheep; these were disposed in each division as follows:—Northern, total 139 per capita, 11 cattle, 16 sheep; Central, total 99 per capita, 5 cattle, 35 sheep; and Southern, total 43 per capita, 3 cattle, 9 sheep.

#### PROFIT AND LOSS.

Attention has already been drawn to the fact that the decrease is not necessarily all of it loss; and it will, therefore, be of interest, before proceeding to details respecting the disposal of live stock for profit, to summarise the position with respect to the utilization or the loss of the past season.

There were rather more sheep, but fewer cattle, put to profit in 1902 than in 1901, as will be seen from the following table:—

	A j.	1901.	1902.	1901.	1902.
		Cattle.	Cattle.	Sheep.	Sheep.
Preserved, frozen, and boiled down ...	...	199,743	185,842	132,114	309,005
Exported, less number imported ...	...	41,627	23,706	*	*
Estimated number killed for food for home consumption	203,508	181,135	590,594	463,344	
				722,708	772,349
Imported in excess of exported	...	...	...	19,890	53,213
Totals put to profit	...	444,878	390,683	702,818	719,136

\* Imports exceeded exports.

The first line of the foregoing table comprises cattle and sheep slaughtered at establishments engaged in freezing, preserving, &c., chiefly for export; the second and fifth lines relate to those imported or exported alive, as returned by the Chief Inspector of Stock and the Collector of Customs, and the particulars contained in the third line are based on returns furnished by the various inspectors of slaughter-houses throughout the State, whose jurisdictions embrace some nine-tenths of the total population, *pro rata* allowance being made for those not so included. These particulars show that 390,683 cattle and 719,136 sheep were marketed last year, against 444,878 cattle and 702,818 sheep in 1901. A comparison of the figures in the third line show that the high retail prices that have been ruling for meat within the State have had a marked effect in reducing the consumption, largely, no doubt, in the direction of greater care and thrift in its use, thus preventing waste, rather than in the quantity actually eaten.

With the foregoing information as to the number of cattle utilized, and with due allowance as made where the imports exceed the exports, together with the numbers in the State, both at the beginning and the end of the year, it is quite easy to determine the losses that have actually taken place.

	Cattle.	Sheep.
Animals in the State on 31st December, 1902	2,543,471	7,213,985
Killed for profit or exported (net) alive during 1902	390,683	719,136
	2,934,154	7,933,121
Animals in the State on 31st December, 1901	3,772,707	10,030,971
Loss during the year 1902	838,553	2,097,850

Thus the loss for the year, without taking into consideration the prospective natural increases which might be reasonably looked for, and which would surely accrue in a normal season, was 838,553 cattle and 2,097,850 sheep.

#### LIVE STOCK SLAUGHTERED.

(Chiefly for Export.)

There were 22 establishments engaged in the slaughter of live stock for profit and chiefly for export. This was four fewer than the number so employed in 1901. Full particulars respecting the number of animals disposed of and the output will be found detailed in Tables VII. and VIII. in the Appendix. These do not include those used by the butcher for home consumption, the latter being referred to further on in this Report, but the numbers frozen that were utilized within the State during the latter portion of the year, have been taken into account in compiling these statements.

The number of hands employed during 1902 was 1,548, against 1,879 in 1901.

A summary of these Appendix tables, together with some additional information with respect to the value of the machinery, &c., employed in the industry, is given in the following statement:—

## A k.

No. of Establishments.	Kind of Establishments.	No. of Hands Employed.	Value of Machinery and Plant.	Value of Land and Premises.	Value of Output.
5	Bacon Curing ...	151	£ 48,195	£ 14,201	£ 168,065
4	Boiling Down ...	4	270	180	340
13	Meat Preserving ...	1,393	354,939	444,499	1,893,712
22		1,548	403,404	458,880	2,062,117

Of the 22 factories, 5 were engaged in bacon-curing, 4 in boiling-down, and 13 in meat-preserving. The value of the machinery, plant, and premises was returned at £862,284, of which £62,396 was employed in connection with bacon-curing. The value of the output was given at £2,062,117.

CATTLE.—The number of cattle slaughtered in these establishments was 185,842 in 1902, against 199,743 in the previous year, a decrease of 13,901. Of those slaughtered, 132,166 were frozen, 51,205 were preserved, and 2,471 boiled down for tallow or for extract. Portions of beasts intended for preserving are frequently utilized for extract, but these are allowed for as far as possible in apportioning the numbers. As compared with 1901, there were 7,845 fewer cattle frozen and 6,242 fewer preserved last year; but those boiled down in 1902 exceeded those so treated in 1901 by 186. There were some 5,000,000 lb. more beef frozen in 1901 than in 1902—namely, 90,053,829 lb., against 85,743,229 lb. There were 23,023,137 lb. preserved in 1902, or 6,882,783 lb. less than in 1901, when 29,905,920 lb. were so treated.

SHEEP.—There were more than twice as many sheep put through these factories in 1902 than in the preceding year—namely, 309,005, instead of 132,114. There were killed for freezing, 117,729 in 1902, and 64,121 in 1901; for preserving, 189,025 in the former and 67,692 in the latter year; and boiled down, 2,251 in 1902, and 301 in the previous year. Frozen mutton turned out amounted to 5,225,727 lb. in 1902, and 3,337,332 lb. in 1901; preserved, 5,374,696 lb. in 1902, and 2,827,247 lb. in 1901.

HOGS.—In contradistinction to the practice adopted with respect to cattle and sheep, the slaughter of which by the large factories, for foreign markets, being kept distinct from those killed by farmers for use in the State, records of pigs slaughtered, whether in the factory or by farmers, are included in the table. Although the number of pigs in the State was greatly reduced during 1902, this has not been brought about by an increase in those slaughtered, as there were 15,601 fewer thus put to profit last year, the figures being:—1901, 104,017; and 1902, 88,416, a relative decrease of 15 per cent.; but the smaller number last year turned out a proportionally larger quantity of bacon, as the weight cured for 1901 and 1902, respectively, was 7,064,714 lb. and 6,512,952 lb., the decrease in bacon amounting to barely 8 per cent. There were also 197,990 lb. of lard obtained. In addition to the bacon cured, a considerable quantity of pork, both fresh and salted, was also obtained; with respect to this, the following table furnishes information, and also shows the output of the more important districts where the slaughtering of hogs takes place. The butchers slaughtered a further number of 33,387 pigs, of an average weight of 77 lb., the carcass being somewhat lighter than in 1901, when the average turned the scales at 86 lb. each. Adding the hogs so slaughtered to those alluded to above, the total is seen to have amounted to 121,803 for the year 1902. Nearly 1,000,000 lb. of bacon and hams were exported during the year.

## A l.

Petty Sessions District.	Pigs Slaughtered.	Fresh Pork.	Salt Pork.	Bacon and Hams.
	Number.	lb.	lb.	lb.
Allora	729	5,425	33,216	32,495
Beaudesert	483	2,080	...	45,658
Bowen	433	3,005	2,646	19,524
Brisbane	49,007	6,623	8,802	3,908,915
Bundaberg	885	21,492	5,325	46,395
Childers	460	5,659	3,148	30,742
Cleveland	224	14,555	3,407	9,200
Crow's Nest	383	70	650	37,978
Dalby	258	922	5,622	22,535
Dugandan	766	4,231	48,451	5,336
Esk	533	2,161	17,915	16,062
Gatton	1,127	5,741	48,201	44,949
Gin Gin	417	9,761	8,852	11,280
Gympie	499	12,158	1,920	24,236
Harrisville	591	9,823	13,030	21,876
Highfields	515	1,735	5,353	55,802
Ipswich	550	7,035	7,890	25,998
Killarney	317	5,270	1,560	23,927
Laidley	1,213	7,401	37,651	46,909
Logan	801	1,321	61,202	30,102
Mackay	900	15,999	12,745	40,548
Marburg	991	22,305	21,807	27,328
Maroochy	402	3,997	4,930	30,829
Maryborough	875	10,641	23,046	43,292
Nanango	495	2,414	2,740	40,754
Nerang	304	1,930	10,015	16,840
Redcliffe	348	1,433	7,680	16,675
Rockhampton	2,098	13,332	6,844	149,488
Rosewood	417	440	11,680	24,237
South Brisbane	15,172	8,430	990	1,356,859
Tiaro	411	1,930	15,354	18,953
Toowoomba	1,612	12,733	30,071	92,912
Warwick	1,829	32,509	3,133	96,948
All Other Districts	2,871	75,003	46,233	97,370
Total, 1902	88,416	329,564	512,109	6,512,952
" 1901	104,017	348,028	314,472	7,064,714

In addition to the 6,512,952 lb. of bacon cured, there were also 841,673 lb. of pork obtained—chiefly by farmers and exclusive of butchers' pork already referred to—of which 329,564 lb. were consumed fresh, and 512,109 lb. were salted. This was in excess of the yield of pork for 1901 by 179,173 lb., and gave a weight of bacon and pork from the 88,416 hogs slaughtered of 7,354,625 lb., or an average weight of 83 lb. each. Passing the metropolitan area and Rockhampton, where the large curing factories are situated, the output of the other districts chiefly comprises farmers' returns, Gatton, Laidley, Toowoomba, and Warwick being the principal contributors.

#### EXTRACT, TALLOW, ETC.

The output of tallow was 5,237 tons, and of extract and essence of meat 192,781 lb. In 1901 the figures were 8,231 tons and 333,014 lb. respectively, decreases in 1902 on the previous year of 2,994 tons of tallow and 140,233 lb. of extract.

#### BY-PRODUCTS.

Out of 22 factories slaughtering for export, 18 furnished returns of by-products conserved during the various processes of the industry, the aggregate values of which were estimated at £243,647. Full particulars for eight years as to the quantity and value of each article are given in Table No. VIII. in the Appendix, and for the year 1902, consisted of the following items placed in their order of value:—Number of hides, 178,090, £170,874; number of skins, 275,176, £26,311; edible fats, 1,191,572 lb., £21,572; manure, 3,654 tons, £14,274; bones, 578 tons, £3,824; horns and hoofs, £3,649; oils, 18,769 gallons, £2,283; hair, 16,310 lb., £860.

In addition to the live stock killed in the preserving factories engaged in preparing produce chiefly for export, large numbers of both cattle and sheep are required for the supply of the home demand. Full particulars as to all cattle slaughtered under the supervision of inspectors of slaughter-houses are furnished in Table No. IX in the Appendix.

This embraces the supply for 451,619 persons out of a total population of 514,851, or approximately nine-tenths of the whole. The last six columns are devoted to showing the per capita consumption of each kind of meat. For the State the flesh consumption was 215 lb. per unit, of which 177 lb. consisted of beef and 31 lb. of mutton. As was to be expected, the proportion of adult males being greater, the Northern division consumed a total of 276 lb., of which 245 lb. were beef. The tropical climate, as leading to waste, probably helped to the greater consumption. The requirements in the other divisions were:—Central, total 236 lb., beef 185 lb.; Southern, total 192 lb., beef 153 lb.

#### MEAT AND DAIRY PRODUCE ENCOURAGEMENT ACT, ETC.

By the above Act the policy was inaugurated of assisting the export of the produce of the meat and dairy industries by the advance of moneys from special funds raised for the purpose to assist in the establishment of factories to convert the raw products into marketable commodities. In pursuance of this policy advances have been made to 13 establishments carrying on the slaughter of live stock for preservation for food, from 10 of which factories loans are still due. Information respecting the loans to slaughtering establishments is given in the following statement:—

Number of works to which advances have been made	...	...	...	...	...	13
Number of works now in operation to which advances have been made	...	...	...	...	...	10
£ s. d.						
Amount advanced up to 31st December, 1902	...	...	...	...	100,439	5 0
Amount advanced to works now in operation to 31st December, 1902	...	...	...	...	95,305	0 0
Indebtedness to State on 31st December, 1902	...	...	...	...	84,726	7 1
Of which accrued interest not yet due amounted to	...	...	...	...	2,816	2 1

There is little doubt that the timely assistance thus afforded proved most useful in facilitating the disposal of surplus stock at a time when the numbers in the State gave rise to the urgent need for opening up foreign markets, and although the unfortunate circumstances through which Australia has just passed, has for the present focussed attention on the supply of stock rather than the demand for markets, yet what has been, will be again, and the necessity of exporting the surplus will become as pressing as in former years. Considering the trying conditions which have obtained the establishments to which advances have been made may be considered to have justified the loans, and as their obligations have been practically met during the period of adversity, there seems no reason to doubt that with improved seasons they will soon pay off their indebtedness.

#### WOOL EXPORTED.

The decrease in the number of sheep which has taken place has of necessity resulted in a heavy decline in the wool available for export. Particulars as to the quantity and value of that exported during each of the past two years are given in the following table:—

#### A m.

Exports.	QUANTITY.			VALUE.		
	Produce of the State.	Foreign.	Total.	Produce of the State.	Foreign.	Total.
Wool (clean) ...	lb. 12,219,040	lb. 27,440	lb. 12,246,480	£ 728,968	£ 1,151	£ 730,119
Wool (greasy) ...	lb. 17,436,038	lb. 172,062	lb. 17,608,100	£ 575,232	£ 6,075	£ 581,307
Total 1902 ...	lb. 29,655,078	lb. 199,502	lb. 29,854,580	£ 1,304,200	£ 7,226	£ 1,311,426
Total 1901 ...	lb. 52,352,846	lb. 183,196	lb. 52,536,042	£ 2,131,864	£ 6,892	£ 2,138,756
Increase in 1902 ...	lb. 22,697,768	lb. 16,306	lb. 22,681,462	£ 827,664	£ 334	£ 827,330
Decrease in 1902 ...	lb. ...	lb. ...	lb. ...	£ ...	£ ...	£ ...

The wool shown in the table is not all the produce of Queensland, a small portion having come borderwise from South Australia into the State for shipment; but although there was rather more of this in 1902 than in 1901, the quantity altogether was so insignificant that it may be ignored, and the total only be considered.

The export for 1902 was 29,854,580 lb., of declared value of £1,311,426, against 52,536,042 lb. in 1901, worth £2,138,756. The average value of both clean and greasy wool for 1902 was somewhat above that for the previous year, but below the figures for both 1899 and 1900. The exporters' values for both clean and greasy wool for each of the past five years were as follow:—

—	1898.	1899.	1900.	1901.	1902.
Greasy wool (average) ... ... ...	6 <sup>3</sup> / <sub>4</sub> d. per lb.	9d. per lb.	8 <sup>1</sup> / <sub>2</sub> d. per lb.	7 <sup>3</sup> / <sub>4</sub> d. per lb.	8d. per lb.
Clean " " "	11 <sup>1</sup> / <sub>2</sub> d. "	16d. "	15 <sup>3</sup> / <sub>4</sub> d. "	13 <sup>3</sup> / <sub>4</sub> d. "	14 <sup>1</sup> / <sub>4</sub> d. "

A larger proportion of the wool was shipped in the grease in 1901, the ratio to the whole being 65 per cent., against 59 per cent. in 1902. No doubt the absence of water, not to mention the unfitness of the sheep from poverty to stand washing, would account for more shearing in the grease, and several of the Brisbane fellmongers shut down for want of water, which would contribute to a lesser quantity being scoured at port of shipment.

There is no sign of a larger quantity of the wool being utilized in the State; on the contrary, the quantity consumed for local manufactures decreases each year. The following statement furnishes information on this point for each of the past five years:—

—	1898.	1899.	1900.	1901.	1902.
Wool used in manufacture ... ...	lb. 308,000	lb. 192,000	lb. 175,000	lb. 156,000	lb. 109,646

A decrease such as is here disclosed is most unsatisfactory.

#### EXPORTS THE PRODUCTS OF THE STATE.

Although imported into this portion of the Report, figures relating to agriculture and mining might seem somewhat out of place, yet, as the pastoral industry provides about one-half of the total exports, there would appear good reason for including particulars here.

Queensland, eminently a country of primary production, draws her wealth from the export of raw material, of which a large proportion consists of the output of the pastoral industry. A series of bad seasons, which seriously affect the numbers of live stock, are followed of necessity by a corresponding decrease in exports of home production.

The following table compares the value of exports of home produce for the last two years, apportioned to the three leading industries of the State:—

**A n.**  
EXPORTS—PRODUCE OF THE STATE.

	1901.		1902.	
	—	Percentage to Total Exports (Home Produce).	—	Percentage to Total Exports (Home Produce).
	£		£	
Agricultural	1,054,952	11·71	1,227,481	14·06
Pastoral	4,750,353	52·72	3,934,174	45·05
Mineral	2,933,147	32·56	3,164,332	36·24
Other	271,244	3·01	406,071	4·65
	£9,009,696	100·00	8,732,058	100·00

The exports for 1902 were below those for 1901 by £277,638, falling from £9,009,696 in the latter, to £8,732,058 in the former year and entirely in products of the pastoral industry.

#### AGRICULTURAL EXPORTS.

There was an increase in agricultural produce exported—namely, from £1,054,952 in 1901, to £1,227,481 last year, and this notwithstanding a heavy reduction in the production and consequently in the export of butter, due to the drought; this article of export had fallen from £86,150 in 1901, to £24,378 in 1902. The principal increases were:—Sugar, from £789,191 in 1901, to £934,932 in 1902, or an increase of £145,741; barley, from £166 to £18,819 = £18,653; green fruit, from £101,923 to £119,954 = £18,031; molasses, from £3,138 to £14,019 = £10,881.

**PASTORAL EXPORTS.**—As already mentioned, and as was to be expected, these showed a marked decline in volume. Amounting to £4,750,353 in 1901, they fell to £3,934,174 in the following year—a decrease of £816,179. The decrease was not in amount alone, but also in the proportion to the total exports, the pastoral industry providing 53 per cent. in 1901, and 45 per cent. only in 1902—a decrease of 8 per cent.

The principal productions of the pastoral industry exported during the last two years, together with the increase or decrease in 1902, are shown in the following statement:—

## A o.

		1901.	1902.	Increase or — Decrease.
		£	£	
Wool	...	2,131,864	1,304,200	— 827,664
Meat (all kinds)	...	1,285,191	1,520,044	234,853
Cattle	...	409,743	203,466	— 206,277
Hides	...	308,519	346,267	37,748
Tallow	...	213,227	214,188	961
Horses	...	159,280	83,218	— 76,062
Sheep	...	142,533	82,068	— 60,465
Skins	...	59,822	127,927	68,105
Horns and Hoofs	...	9,015	10,533	1,518
Manure	...	8,941	6,950	— 1,991
Bones and Bonedust	...	6,004	14,392	8,388
Gluepieces	...	5,330	5,172	— 158

The decrease of £827,664 in the value of wool exported exceeded by £11,485 the total decrease on pastoral exports, and that notwithstanding that there were other large decreases, namely:—Cattle, £206,277; horses, £76,062; and sheep, £60,465, besides a few minor decreases. The difference between these decreases and the total deficiency were made up of increases in other items, of which the more important were:—Meat (all kinds), £234,853; skins, £68,105; and hides, £37,748.

## MINING EXPORTS.

These, fortunately, showed a slight increase last year; an increase, however, that fell short, both actually and relatively, of that attending products of agriculture. Mineral products exported amounted last year to £3,164,332, and comprised 36 per cent. of the total imports of home production, and consisted chiefly of:—Gold, £2,709,516; copper, £206,426; tin, £131,498; silver (including gold ore), £87,574.

## ANGORA GOATS.

The question of establishing a new industry in the production of mohair has recently attracted a good deal of attention, and the breeding of the Angora goat, with this end in view, has been taken up by a not inconsiderable number of settlers.

Inquiries have also been made by several persons desirous of securing purebred stock, and steps will be taken by this Department to ascertain to what extent the industry is extending, and it is hoped to obtain definite information on the subject for inclusion in subsequent reports.

## DAIRYING.

That dairying is destined to become one of the leading industries of the State has passed beyond the realm of doubt. Notwithstanding periods of extreme dryness which recur from time to time, the general conditions of the climate are well adapted to the rearing and handling of horned cattle; the pastures in normal seasons are of the best, and unlimited fertile soil readily admits of grazing being supplemented to any extent by stall feeding.

The future of Queensland in this respect is amply proved by the progress made in dairying during the years 1895-1901, a period of far from satisfactory seasons, and yet the production of butter increased from 3,719,523 lb. in 1895 to 9,741,882 lb. in 1901.

The steps taken by the Department of Agriculture in establishing travelling dairies, thus carrying instruction to the doors of the dairy farmer, combined no doubt with the leavening that has taken place through past students from Gatton College having become distributed throughout the agricultural districts, have led to a revolution in the methods adopted in conducting the industry, and which it was so essential should take place if butter was to become an article of substantial export.

These improvements have led to the cow taking her proper place in the economy of the farm as one of the principal sources of income, and has resulted in wholesale methods of dealing with dairy products by securing the establishment of creameries and butter factories throughout the agricultural areas.

The place of the former has unfortunately been to a considerable extent taken by private separators, resulting too frequently in the despatch of stale cream to the factories, and a consequent deterioration of the butter. Whether some system of co-operation could not be adopted whereby the advantages of the small private separators could still be secured, and the cream yet sent with frequency to the factory, has often been suggested, but the Queensland farmer, for the most part seems to like "to fight for his own hand," and but little progress has been made in this direction. Attention to this matter appears likely to be forced on the farmers by the recent action of certain butter factories which have notified their intention to pay a higher price for cream delivered three times a week instead of twice, as formerly.

A statutory system of inspection and grading of butter for export would perhaps bring the matter home to the proprietors of the factories, who would promptly pass it on to the farmer by a system of payment by results. In Victoria, under the system and control adopted, the value of butter exported rose in twelve years from £60,000 to £1,200,000.

The experience of the dairying industry during 1902 is shown in the following table :—

## B.

RETURN of BUTTER and CHEESE FACTORIES and the RESULTS OBTAINED therefrom during the Year 1902; also  
PRODUCTION by PRIVATE MAKERS.

DISTRICT.	ESTABLISHMENTS HANDLING		MILK, CREAM, AND BUTTER.						CHEESE.		
	Cream Only.	Cream and Butter.	*Milk dealt with.	*Cream Produced.	BUTTER MADE.			Pro- ducers.	Milk.	Cheese.	
					At Central Factories.	By Farmers.	Total.				
Allora ...	42	62	Gallons.	Lb.	Lb.	Lb.	Lb.	4	Gallons.	Lb.	
Beaudesert ...	137	106	433,045	314,922	7,000	17,537	24,537	28,642	28,661		
Brisbane ...	41	67	733,800	485,480	91,150	32,748	123,898	...	...		
Bundaberg ...	30	192	184,843	150,960	1,013,882	34,498	1,048,380	...	...		
Caboolture ...	18	38	443,832	316,329	62,921	57,820	120,741	1	144	144	
Childers ...	1	94	306,400	171,812	...	17,477	17,477	2	740	740	
Crow's Nest ...	23	162	105,613	68,512	...	25,098	25,098	...	...		
Dugandan ...	155	76	298,874	206,777	...	21,465	21,465	8	9,808	9,808	
Esk ...	73	26	717,774	546,233	161,472	10,085	171,557	1	3,500	3,500	
Gatton ...	309	108	1,072,495	771,365	134,921	7,160	142,081	2	5,850	5,493	
Gympie ...	43	139	413,052	275,944	71,415	21,846	94,438	1	72	72	
Harrisville ...	125	7	586,895	466,000	121,050	7,484	1,658	...	...		
Highfields ...	68	136	340,966	251,027	...	25,110	25,110	3	56,640	56,024	
Ipswich ...	120	22	528,080	379,230	866,981	9,013	875,994	4	78,059	82,047	
Laidley ...	101	22	486,874	362,627	...	7,264	7,264	...	...		
Logan ...	35	241	358,892	248,963	1,500	34,613	36,113	...	...		
Mackay ...	5	101	208,939	141,303	22,459	40,535	62,994	...	...		
Maryborough ...	32	79	140,213	94,251	35,208	16,482	51,690	...	...		
Marburg ...	129	4	1,233,025	1,001,508	...	470	267,748	...	...		
Maroochy ...	11	108	191,226	135,118	...	25,912	25,912	2	808	808	
Nerang ...	29	105	624,118	530,236	...	24,133	24,133	...	...		
Redcliffe ...	107	76	533,692	412,032	112,856	33,237	146,093	3	11,880	11,880	
Rockhampton ...	97	275,642	170,535	19,589	48,060	67,649	2	1,280	1,280		
Rosewood ...	48	18	674,420	493,223	...	7,599	7,599	...	...		
South Brisbane ...	8	52	59,344	48,308	275,125	14,200	289,325	...	...		
Tiaro ...	47	99	593,783	312,707	68,362	13,497	81,859	5	7,446	7,446	
Toowoomba ...	102	201	927,492	722,535	759,115	33,989	793,104	8	485,425	497,289	
Warwick ...	22	72	272,455	181,520	...	19,977	19,977	6	183,211	185,463	
All other Districts ...	59	569	769,846	503,823	...	127,088	127,088	10	57,700	61,358	
Total ...	1,920	3,079	13,787,175	9,946,244	4,099,768	751,591	4,851,362	62	931,205	952,013	
Total ...	1,939	3,576	26,286,459	19,165,603	7,932,213	1,809,669	9,741,882	128	2,410,627	2,436,912	

\* N.B.—The quantities of milk and cream in any district bear but little relation to the butter made in that district, as much of the milk and cream is conveyed elsewhere than the place of production for manufacture.

The effects of the drought are at once apparent, for although the number of establishments returned as handling cream and butter only fell from 5,515 to 4,999, or a decline of 516, yet nearly all the products decreased by approximately 50 per cent.

MILK.—In 1901 26,286,459 gallons of milk were used in the production of butter; in 1902 the output for the purpose was 13,787,175 gallons. In 1901 there were 8 districts with an output exceeding 1,000,000 gallons; only two produced that quantity for 1902. The output of each of them for 1901 and 1902, respectively, was :—Beaudesert, 1,654,792 and 733,800 gallons; Dugandan, 1,290,318 and 717,774 gallons; Gatton, 2,176,250 and 1,072,495 gallons; Harrisville, 1,400,314 and 586,895 gallons; Marburg, 1,964,552 and 1,233,025 gallons; Redcliffe, 1,185,476 and 533,692 gallons; Rosewood, 1,604,968 and 674,420 gallons; and Toowoomba, 1,938,181 and 927,492 gallons; thus these 8 districts, which in 1901 produced almost as much milk for butter as the whole State, showed for 1902 a decrease amounting to 6,735,258 gallons.

CREAMERIES.—There were 62 establishments engaged on a considerable scale in extracting cream from milk in addition to those engaged in the manufacture of butter. These latter mostly received the cream from creameries or from farmers having private separators, although in some instances they also extracted on the factory premises, and so were purchasers of milk. Creameries for the most part only undertake the extraction of cream from the milk purchased from the dairy farmer, but some of them are owned by farmers in a large way of business, who supply most if not all of the milk. The output of cream being the test for inclusion as a creamery. These 62 establishments gave employment to 125 hands, the value of the machinery being £8,485, placed on land and premises of an estimated value of £3,406. In addition to these, 1,858 farmers, who separated cream on a small scale, sent the product to a factory, making no butter themselves, whilst a further 3,079, whilst obtaining cream from milk, in most cases by hand-skimming, also made butter.

The total quantity of cream produced last year was 9,946,244 lb. of cream against 19,165,603 lb. in 1901, a decrease of 9,219,359 lb., a decline of about 50 per cent. There is of necessity no relation whatever between the butter made in a given district and the milk or cream produced there; but, with respect to the two latter products, although there is considerable disturbance, it is much less than is the case with butter, milk not usually being carried so far for the extraction of the cream, as is the latter for its conversion into butter. Thus 1 gallon of milk yields almost  $\frac{3}{4}$  lb. of cream (0.72), a proportion which a comparison of columns 4 and 5 of table B is closely maintained in many of the districts.

The following statement furnishes particulars of State advances made to creameries from trust funds under statute and from loans in aid of agricultural production :—

Number of works to which advances have been made ...	...	...	...	...	19
Number of such works now in operation ...	...	...	...	...	9
					£ s. d.
Amount advanced up to 31st December, 1902 ...	...	...	...	...	1,909 16 2
Amount advanced to works now in operation to 31st December, 1902 ...	...	...	...	...	846 0 0
Indebtedness to State on 31st December, 1902 ...	...	...	...	...	868 17 7
Including interest due, but not paid ...	...	...	...	...	26 1 2
And interest accrued, but not yet due ...	...	...	...	...	46 16 5

BUTTER.—The production of butter last year was about 50 per cent. below that for 1901—namely, 4,851,362 lb. against 9,741,882 lb. Of the two kinds, factory and farmers' butter, the relative decrease was slightly greater with regard to the latter. Central factories turned out 4,099,768 lb., or 85 per cent. of all the butter produced in 1902, and 7,932,213 lb., or 81 per cent. of the whole in 1901, whilst the farmers' output was 751,594 lb. in 1902, and 1,809,669 lb. in 1901. The value of the butter produced last year, on the basis of the exporters' entries on that sent out of the State, was £215,481, which gives an average value per lb. of 10½d.

AVERAGES.—On the experience of the whole industry for 1902, it would appear that 1 gallon of milk yielded 0.72 lb. of cream, or 0.35 lb. of butter, and 1 lb. of cream made 0.49 lb. of butter. Put in other terms :—

1.39 gallons of milk yielded	...	...	...	...	1 lb. cream.
2.05 lb. of cream produced	...	...	...	...	1 lb. butter
2.84 gallons of milk produced	...	...	...	...	1 lb. butter.

Brisbane (North and South), Ipswich, and Toowoomba are the chief centres of production, these districts between them turning out 3,006,803 lb., or 62 per cent. of the total output; the quantity and proportion of the total contributed by each being :—Brisbane (North and South), 1,337,705 lb., or 28 per cent.; Ipswich, 875,994 lb., or 18 per cent.; and Toowoomba, 793,104 lb., or 16 per cent. The other districts in which the production exceeded 100,000 lb. were :—Marburg, 267,748 lb.; Dugandan, 171,557 lb.; Redcliffe, 146,093 lb.; Gympie, 142,896 lb.; Esk, 142,081 lb.; Beaudesert, 123,898 lb.; and Bundaberg, 120,741 lb.

BUTTER EXPORTED.—Consequent upon the reduced production, a decrease of export was inevitable; but the decline was relatively a much larger one, for, whereas the production in 1902 amounted to about one-half of that for 1901, the export in the former was only a little over one-fourth of that in the latter year. The exports of butter from each of the three Eastern States of the Commonwealth for 1902 were as follow :—

	lb.	£
Queensland	552,625	24,610
New South Wales	2,939,086	149,625
Victoria	17,184,834	876,826

Thus Queensland contributed about one-fortieth of the export of the three States, which was about one-half the ratio for 1901, showing that this State suffered in common, but to a greater extent, than its neighbours. The centesimal proportions of decrease last year on the figures for 1901 were :—Queensland, quantity 74, value 71; New South Wales, quantity 72, value 67; and Victoria, quantity 41, value 30.

The position with respect to exports of butter were thus very similar in Queensland and New South Wales, but considerably more favourable for Victoria. In each of the States the decrease in quantity was partially discounted by an increase in price, but only to a very slight extent in Queensland, to a slightly greater extent in New South Wales, but the accession in value was considerably with the Victorian product.

Under the Meat and Dairy Produce Encouragement Acts, and from votes from loans in aid of co-operative agricultural production, advances are made to factories engaged in converting the various products of the dairying industries into articles of export. Particulars with respect to such advances made to butter factories are shown in the following statement :—

Number of factories to which advances have been made	...	...	...	...	...	13
Number of factories now in operation to which advances have been made	...	...	...	...	...	7
£ s. d.						
Amount advanced up to 31st December, 1902	...	...	...	...	...	11,685 12 6
Amount advanced to works now in operation to 31st December, 1902	...	...	...	...	...	6,726 0 3
Indebtedness to State on 31st December, 1902	...	...	...	...	...	6,689 12 9
Including interest owing, but not paid	...	...	...	...	...	41 17 8
And interest accrued, but not yet due	...	...	...	...	...	231 16 3

Thus, out of advances aggregating £11,686, the sum of £5,270 has been repaid, together with a considerable sum in interest, as only a small sum of £42 of interest accrued, *and due*, remains unpaid, which, under the circumstances, can only be considered most satisfactory.

### CHEESE.

Referring again to the foregoing Table B, it will be seen that producers of cheese decreased by one-half, 62 last year against 128 in 1901, and the output from 2,436,912 lb. in the latter to 952,003 lb. in the former year. The quantity of milk converted into cheese was 931,205 gallons in 1902, and 2,410,627 gallons in the preceding year. It takes approximately 1 gallon of milk to make 1 lb. of cheese. The districts of Toowoomba and Warwick turned out 497,289 lb. and 185,463 lb. of cheese respectively, or, collectively, 72 per cent. of the total production of the State. The outputs of these districts in 1901 were 1,030,807 lb. and 483,456 lb. Only three other districts produced upward of 20,000 lb.—namely: Highfields, 82,047 lb.; Harrisville, 56,024 lb.; and Allora, 28,661 lb.

The assistance afforded to this branch of dairying by State loans in aid of manufacture is shown by the following table :—

Number of factories to which advances have been made	...	...	...	...	...	4
Number of such factories now in operation	...	...	...	...	...	2
£ s. d.						
Amount advanced up to 31st December, 1902	...	...	...	...	...	1,525 0 0
Amount advanced to works now in operation to 31st December, 1902	...	...	...	...	...	1,050 0 0
Indebtedness to State on 31st December, 1902	...	...	...	...	...	1,045 5 1
Including interest due, but not paid	...	...	...	...	...	12 16 8
And interest accrued, but not yet due	...	...	...	...	...	63 7 11

## CONDENSED MILK.

There were three establishments engaged in preserving milk by condensation during 1902, and as the primary difficulties connected with the initiation of the industry are overcome, no doubt, with improved seasons for dairying, this method of conserving its chief product will be more largely adopted.

Two factories have received State advances, particulars concerning which are as follow:—

Number of works to which advances have been made ...	... ...	... ...	... ...	... ...	2
					£ s. d.
Amount advanced up to 31st December, 1902 ...	...	...	...	...	2,175 0 0
Indebtedness to State on 31st December, 1902 ...	...	...	...	...	2,368 0 10
Including interest accrued, but not yet due ...	...	...	...	...	193 0 10

Both of these factories are still under the operations of the Meat and Dairy Produce Encouragement Act.

The value of condensed milk made during 1902 was £7,097, against £12,698 in 1901. The imports for last year amounted to 2,426,762 lb., valued at £44,478; and the exports to 46,540 lb., valued at £1,006, of which 28,414 lb., worth £604, were the produce of the State.

## POULTRY.

It was to be expected that the heavy decline in all agricultural products would result in a decrease in the number of poultry kept; but the decrease in the number returned is so great as to lead to the conclusion that the collection has not been so perfect in 1902 as in the previous year. It will be readily understood that on small farms, where no cattle were left and no agricultural operations were carried on during 1902, that the collector would be apt to overlook the collection of the poultry, and thus diminution in their numbers be unduly occasioned, and a return to normal figures at the end of 1903 may be looked for.

The number of each kind of poultry returned for last year in the whole State, and also in the principal districts, are shown in the following table:—

## B a.

Petty Sessions District.	Fowls.	Ducks.	Geese.	Turkeys.	Other.	Eggs.
	No.	No.	No.	No.	No.	Doz.
Allora	16,092	180	30	326	...	47,859
Beaudesert	10,116	326	104	161	30	44,305
Brisbane	11,646	758	62	4	25	34,289
Bundaberg	11,924	307	24	172	182	33,405
Cairns	12,014	364	22	71	18	33,312
Childers	7,313	150	34	113	3	27,531
Crow's Nest	8,152	53	135	31	...	13,187
Dalby	5,830	112	41	345	3	11,925
Dugandan	15,327	349	168	160	22	51,583
Esk	10,581	314	272	427	2	49,117
Gatton	25,793	614	546	201	14	95,725
Gympie	9,357	269	128	184	8	30,428
Harrisville	9,986	314	137	172	...	35,565
Herberton	5,673	71	26	26	10	19,929
Highfields	11,543	39	42	23	...	55,035
Ipswich	9,376	129	42	49	...	24,901
Killarney	6,109	260	53	88	39	12,130
Laidley	13,733	343	503	174	3	49,888
Logan	13,444	136	195	19	17	62,156
Mackay	14,531	347	95	139	78	44,280
Marburg	12,966	151	239	29	...	37,341
Maroochy	9,372	265	27	17	5	70,034
Maryborough	6,346	210	39	51	...	34,748
Nanango	5,589	99	63	141	11	8,716
Nerang	8,295	394	64	48	6	24,282
Redcliffe	9,356	383	135	39	130	26,998
Rockhampton	11,629	217	62	135	17	48,245
Rosewood	9,306	122	61	65	2	37,983
Roma	5,369	54	...	149	...	17,748
South Brisbane	5,617	2,902	34	10	...	49,945
Tiaro	7,043	247	56	51	23	21,726
Toowoomba	32,216	402	162	679	6	78,025
Townsville	6,274	1,108	18	...	...	24,188
Warwick	16,416	399	204	1,166	44	38,171
All other districts	69,210	2,329	693	1,892	197	204,121
Total, 1902	443,544	14,717	4,516	7,357	895	1,498,821
Total, 1901	651,149	36,877	9,823	16,810	1,284	2,595,779
Increase, 1902	...	...	...	...	...	...
Decrease, 1902	207,605	22,160	5,307	9,453	389	1,096,958

The returns do not profess to comprise all the poultry in Queensland, but only those kept on holdings where at least some agricultural operations were carried on, consequently poultry kept in towns or their suburbs or on holdings entirely pastoral in their character would not be included. It will be noticed that the decrease amongst ducks, geese, and turkeys is relatively greater than with fowls.

## HONEY AND WAX.

Although the output of honey declined by 39 per cent. during 1902, the decrease was almost entirely in the number of hives, as the average weight of honey obtained from each productive hive fell but little short of the return for 1901, and unproductive hives were fewer last year than in the previous one. The following table furnishes full information on the subject for 1902:—

## Bb.

District.	No. of Hives.		Honey.	Average per Productive Hive.	Wax.	District.	No. of Hives.		Honey.	Average per Productive Hive.	Wax.
	Productive.	Non-Productive.					Productive.	Non-Productive.			
Allora ...	101	41	2,540	25	137	Maroochy ...	898	138	55,598	62	1,100
Beaudesert ...	177	26	8,892	50	348	Maryborough ...	123	97	6,280	51	217
Brisbane ...	313	195	11,712	37	242	Nerang ...	507	335	37,209	73	581
Bundaberg ...	51	100	5,712	112	175	Redcliffe ...	222	59	5,676	26	80
Caboolture ...	575	142	17,858	31	508	Rockhampton ...	342	69	19,525	57	620
Clermont ...	107	50	5,765	54	79	Rosewood ...	138	33	6,302	46	229
Cook ...	248	1	13,376	54	360	South Brisbane ...	240	226	8,336	35	248
Crow's Nest ...	282	171	11,981	42	164	Tiaro ...	162	1	3,844	24	124
Dugandan ...	140	189	2,270	16	166	Toowoomba ...	445	98	17,568	39	321
Esk ...	224	31	7,194	32	369	Warwick ...	312	300	21,545	69	420
Gatton ...	310	30	11,716	38	218	Woodford ...	153	...	4,640	30	177
Gympie ...	343	41	14,380	42	342	All other Districts	726	321	20,057	28	687
Harrisville ...	218	101	9,432	43	400						
Herberton ...	149	...	3,862	26	35	Total for 1902 ...	9,179	3,137	388,281	42	10,204
Ipswich ...	177	37	4,650	26	114	Total for 1901 ...	14,171	3,659	634,651	45	16,648
Killarney ...	314	122	18,990	60	357						
Laidley ...	219	24	2,668	12	149	Increase for 1902	...	...	...	...	...
Logan ...	827	142	26,361	32	1,193	Decrease for 1902	4,992	522	246,370	3	6,444
Marburg ...	136	17	2,342	17	44						

**HONEY.**—In 1901, from 14,171 productive hives, 634,651 lb. of honey were obtained, or an average of 45 lb. to each hive. The figures for last year were 388,281 lb. from 9,179 hives, or an average of 42 lb. to each. There were also 3,659 unproductive hives in 1901, and 3,137 in the following year; thus, in 1902, the number of hives had decreased by 5,514, of which 4,992 were productive and 522 were unproductive, and there was also a decrease in the output of honey of 246,370 lb. Although the production of honey to a greater or less extent is well distributed throughout the State, yet four districts contributed 36 per cent. of the total output—namely: Maroochy, 55,598 lb. from 898 hives, an average of 62 lb.; Nerang, 37,209 lb. from 507 hives, an average of 73 lb. (the second best average for the year); Logan, 26,361 lb. from 827 hives, an average of 32 lb.; and Warwick, 21,545 lb. from 312 hives, an average of 69 lb. The best average yield in any district was obtained at Bundaberg, where with a few hives—51—an average of 112 lb. was obtained.

Although the production so decreased, yet the amount of honey sent out of the State last year considerably exceeded the exports for 1900 and 1901 combined. The quantities and values of honey exported for each of the last three years are shown in the following table:—

Bc.  
HONEY EXPORTED.

Country.	1900.		1901.		1902.	
	lb.	£	lb.	£	lb.	£
United Kingdom ...	23,564	234	17,653	167	224	2
Australasia ...	107,655	1,068	32,953	334	208,504	2,398
Elsewhere ...	860	9	4,110	43	7,560	74
	132,079	1,311	54,716	544	216,288	2,474

Practically the whole quantity goes to other States of Australasia, the exports to the United Kingdom for each of the last three years being:—1900, 23,564 lb.; 1901, 17,653 lb.; and 1902, 224 lb. only.

**WAX.**—There were 10,204 lb. of wax obtained last year, or 6,444 lb. less than in 1902. The district with the largest output was Logan, 1,193 lb., followed by Maroochy with 1,100 lb.; Rockhampton, 620 lb.; and Nerang, 581 lb.

## AGRICULTURAL PRODUCTS IMPORTED.

As a corollary to the failure of the agricultural industry last year, it was inevitable that the importation of food stuffs should largely increase.

No less a sum than £1,865,313 was sent out of the State for the purchase of food stuff, chiefly for commodities that, with normal seasons, would be capable of production within the State. The following table compares the values of agricultural products imported for the past five years:—

## C.

Value of—	1898.		1899.		1900.		1901.		1902.	
	£	£	£	£	£	£	£	£	£	£
Grain, &c., and various Products thereof ...	645,426	640,765	589,948	457,044	846,621					
Fruit ...	119,580	150,130	155,609	160,413	186,521					
Vegetables ...	100,473	102,818	95,922	124,296	203,640					
Other Products of Agriculture ...	168,980	163,698	184,148	170,388	628,531					
	1,034,459	1,057,411	1,025,627	912,141	1,865,313					

The value of such imports for 1901—namely, £912,141, was below the value of those for any other year of the quinquennium, and was exceeded by the imports for last year by £953,172. For grain and its products, £457,044 were paid in 1901, and £846,621 last year, an increase of £389,577. Fruit cost £160,413 in 1901, and £186,521 in 1902, an advance of £26,108; for vegetables, £124,296 were sent out in 1901, and £203,640 last year, an increase of £79,344; and for other agricultural products, £170,388 and £628,531 respectively, or an advance of £458,143.

The large increase in the first line of the table was, of course, mainly caused by heavy importation of wheat and flour, to replace the deficiencies of the wheat crop, and there is no climatic reason why nearly all the articles comprised should not be eliminated from our imports. Owing to economic conditions, rice will, probably, for a long time continue to be introduced from outside the State. Fruit importation mostly consists of those belonging to the temperate zone, and which, although grown in Queensland, ripen earlier here, and as they go out of season, the demand has to be met from various places in the order of their reaching maturity. The converse is the case with Queensland fruits exported, not only does this State supply tropical fruits for the southern markets, but to some extent also European fruits at the commencement, and, therefore, the best of the season, as they ripen here considerably earlier.

The foregoing table dealt with imports of agricultural products only, the following statement supplies more detailed information respecting some of the items comprised and of other foodstuffs also.

### C a.

#### WHERE IMPORTS EXCEED EXPORTS.

ITEMS.	IMPORTS.		EXPORTS.		NET IMPORTS.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Barley (Pearl) ...	64,113 lb.	£ 481	3,182 lb.	£ 21	60,931 lb.	£ 460
Biscuits ...	459,546 "	16,117	34,654 "	703	424,892 "	15,414
Butter ...	3,271,059 "	177,839	552,625 "	24,610	2,718,434 "	153,229
Chaff ...	39,446 tons	187,306	236 tons	931	39,210 tons	186,375
Cheese ...	857,403 lb.	27,671	149,108 lb.	3,748	708,295 lb.	23,923
Coffee ...	164,044 "	5,884	23,888 "	804	138,156 "	5,080
Eggs ...	441		219			222
Flour ...	701,626 centals	318,982	2,194 centals	1,273	699,432 centals	317,709
Hay ...	9,751 tons	54,139	91 tons	356	9,660 tons	53,783
Maize ...	634,688 centals	219,168	18,153 centals	6,092	616,535 centals	213,076
Maizena and Cornflour ...	383,113 lb.	4,139	13,236 lb.	210	369,877 lb.	3,929
Malt ...	45,507 centals	37,377	996 centals	785	44,511 centals	36,592
Milk (Preserved) ...	2,426,762 lb.	44,478	46,540 lb.	1,006	2,380,222 lb.	43,472
Oatmeal, &c. ...	15,245 cwt.	16,382	35 cwt.	60	15,210 cwt.	16,322
Oats ...	108,157 centals	41,769	1,572 centals	725	106,585 centals	41,044
" (Crushed) ...	14,114 "	9,148	...	...	14,114 "	9,148
Onions ...	4,230 tons	24,617	21 tons	194	4,209 tons	24,423
Potatoes ...	27,848 "	152,560	89	641	27,759 "	151,919
Preserves ...	3,171,033 lb.	45,167	323,357 lb.	4,843	2,847,676 lb.	40,324
Rice ...	96,576 centals	56,985	4,445 centals	2,389	92,131 centals	54,596
Wheat ...	125,663 "	44,114	500 "	124	125,163 "	43,990
Total Values ...	...	1,484,764	...	49,734	...	1,435,030

#### WHERE EXPORTS EXCEED IMPORTS.

ITEMS.	IMPORTS.		EXPORTS.		NET EXPORTS.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Arrowroot ...	5,648 lb.	£ 59	360,719 lb.	£ 3,872	355,071 lb.	£ 3,813
Bacon and Hams ...	373,611 "	16,132	914,090 "	32,838	540,479 "	16,706
Barley ...	19,424 centals	7,644	60,516 centals	18,801	41,092 centals	11,157
Cattle, Sheep, and Pigs ...	...	150,984	...	286,654	...	135,670
Fruit (Green) ...	73,875		...	119,982	...	46,107
Lard ...	44,388 lb.	1,156	120,741 lb.	2,959	76,353 lb.	1,803
Meat (all kinds, including Extract) ...	...	41,393	...	1,524,392	...	1,482,999
Molasses ...	...	...	3,380 tons	14,023	3,380 tons	14,023
Oysters ...	...	1,407	...	19,740	...	18,333
Rye ...	66 centals	23	211 centals	64	145 centals	41
Sugar ...	121 tons	2,326	71,294 tons	934,932	71,173 tons	932,606
Total Values ...	...	294,999	...	2,958,257	...	2,663,258

The table is divided into two portions, the first half dealing with articles showing a net import, and the second half those in which the exports exceed the imports.

NET IMPORTS.—Flour was the chief item, consisting of 699,432 centals, valued at £317,709; like figures for 1901 were:—618,940 centals, and £238,729. The value of other prominent items were:—Maize, 1901, £21,152; 1902, £213,076. Chaff: 1901, £52,130; 1902, £186,375. In connection with these items, £34,236 worth of compressed fodder imported in 1902 must also be allowed for. Butter, in 1901, a substantial net export (£84,299); in 1902, a net import of £153,229; and potatoes, 1901, £81,220; 1902, £151,919.

NET EXPORTS.—Meat (all kinds and extract), £1,283,437 in 1901, and £1,482,999 in 1902; sugar, £788,561 in 1901, and £932,606 in 1902; cattle, sheep, and pigs, £226,190 in 1901, and £135,670 in 1902.

If the present promise of good seasons is fulfilled for the current year, the import and export returns for 1903 will afford much more satisfactory material for the construction of the above tables in connection with the next Report.

A recently patented preparation made from wheat, known as "Force Food," would appear to be coming much into use. A representative of the proprietary is now in Australia to make arrangements for establishing a branch factory for the production of "Force Food" for the Australasian markets. It was unfortunate that last season's wheat crop proved so disastrous, as there is no doubt ample scope, on the Downs alone, for the production of all the wheat required for all purposes by a much larger population than that of Australasia, and the soil of the Downs forms but a fraction of the area suitable for wheat cultivation to be found within this State, and the crop for 1903 will probably prove nearly sufficient for the requirements of the State.

#### LABOUR AND MACHINERY, ETC., ON FARMS.

With such a decline in all farming operations as took place last year, it was only to be expected that the number of hands engaged and the value of machinery employed would decrease also. Without crops to harvest, there would be no need for men to harvest them, though, unfortunately for the farmer, a large amount of unremunerative labour was expended in preparing the land that gave no return. As regards machinery and implements, these would, no doubt, still be on the farms, but the wear and tear on farming appliances is very great, and probably the deterioration is even greater without use than when reasonably employed, and with no harvest to pay expenses, repairs would be postponed and replacement out of the question, consequently a decrease in the aggregate value was inevitable.

The following table gives the usual detailed particulars respecting labour employed and machinery and implements *in situ* during 1902:—

#### C b.

DISTRICT.	LABOUR.				VALUE OF MACHINERY AND IMPLEMENTS.			
	Farming.		Dairying.		Farming	Dairying	Irrigation	Total
	Males.	Females.	Males.	Females.	£	£	£	£
Allora ... ... ...	842	168	44	72	44,851	2,462	705	48,018
Ayr ... ... ...	843	18	5	4	9,407	...	18,750	28,157
Brisbane ... ... ...	795	6	36	98	10,989	2,388	400	13,777
Bundaberg ... ... ...	1,802	91	47	94	39,218	3,282	37,077	79,577
Childers ... ... ...	1,133	9	3	79	14,714	491	120	15,325
Dalby ... ... ...	402	4	14	48	13,116	2,785	75	15,976
Dugandan ... ... ...	629	80	23	190	15,799	3,779	280	19,858
Gatton ... ... ...	1,052	68	228	288	34,938	7,845	730	43,513
Gympie ... ... ...	415	31	39	73	11,961	4,120	552	16,633
Harrisville ... ... ...	490	55	79	106	17,350	3,701	395	21,446
Highfields ... ... ...	559	22	7	230	14,195	2,078	...	16,273
Killarney ... ... ...	346	...	1	4	17,395	607	25	18,027
Laidley ... ... ...	713	131	129	156	21,894	2,040	...	23,934
Logan ... ... ...	784	11	31	299	13,893	2,982	20	16,895
Mackay ... ... ...	1,915	78	26	50	30,988	1,087	775	32,850
Marburg ... ... ...	489	183	154	119	14,909	2,756	...	17,665
Redcliffe ... ... ...	300	...	...	192	14,784	3,104	200	18,088
Rockhampton ... ...	466	44	57	87	14,337	2,005	3,071	19,413
Toowoomba ... ... ...	1,673	64	45	193	64,335	3,949	255	68,539
Warwick ... ... ...	953	38	55	24	62,208	1,100	130	63,438
All other Districts ...	12,371	776	921	1,107	171,951	33,857	23,674	229,482
Total 1902 ...	28,972	1,877	1,944	3,513	653,232	86,418	87,234	826,884
Total 1901 ...	31,251	2,119	2,477	3,820	704,406	85,860	47,042	837,308

LABOUR.—There were 36,306 persons engaged in all branches of agriculture last year, against 39,667 in 1901, or a decrease of 3,361. Of those for 1902 there were 30,916 males and 5,390 females, and for the preceding year 33,728 males and 5,939 females.

It will be noticed that those engaged in general agriculture and dairying respectively are tabulated separately, adjustment being made in cases where the returns showed persons were

engaged partially in both industries. The numbers returned in 1902 as employed in general farming were 28,972 males and 1,877 females, against 31,251 males and 2,119 females in the previous year. In dairying, the figures were 1,944 males and 3,513 females in 1902, and 2,477 males and 3,820 females in 1901, and, as was to be expected, females predominated in this branch of the industry. The sugar districts employed the largest number of male hands, Mackay coming first with 1,915, followed by Bundaberg, 1,802; the third being Toowoomba, a general farming district, with 1,673; Childers, another sugar district, coming next with 1,133. The only other district in which the number of males engaged in general farming ran into four figures was Gatton with 1,052, where also the largest number of hands engaged in dairying was also returned—namely, 516 of both sex.

**MACHINERY, ETC.**—The total value of machinery, &c., last year was returned at £826,884, or a decrease of £10,424 on the figures for 1901. The collection admits of these being shown under three heads—namely: Farming, Dairying, and Irrigation. Factories for the production of sugar are not included as agricultural machinery, being returned under the head of secondary manufactures. The decrease on the figures for 1901 would be much greater only for the large outlay which took place during 1902 with relation to irrigation, the increase for 1902 under this head amounting to £40,192, which to that extent discounted the decrease in machinery and implements engaged in general agriculture. Of this large increase under the head of irrigation, £27,000 was added in the Bundaberg district, mainly on one estate. The depreciation in value of machinery and implements employed in general farming amounted to about 7 per cent. on the figures for 1901, the values for the two past years being—1901, £704,406; and for 1902, £653,232.

#### AGRICULTURE PROPER.

The undaunted determination of our Queensland farmers was fully demonstrated by the persistent efforts maintained by them throughout the recent adverse seasons. In spite of repeated failures of their crops they persisted in their efforts, and the area placed under cultivation in 1902 only fell short of the acreage so dealt with in the previous year by barely 6 per cent. In 1900 there were 480,372 acres cultivated, which was increased in the following year to 507,317 acres, but fell again in 1902 to 478,121 acres, or a little below the figures for 1900.

Full information as to the acreage cultivated and cropped both in the whole State, and also in the various petty sessions districts, is given at Tables Nos. X., XI., XII., XIII., and XIV. in the Appendix.

Unfortunately the returns obtained were quite inadequate to repay the energy and labour expended, and only 275,383 acres, or 57 per cent. of the total area cultivated bore any crop whatever, and almost without exception all the returns were much below the average. Maize was the only cereal from which any considerable yield was obtained, and of this the total return was only two-fifths and the average return one-half of normal. Of the other grain crops the areas reaped were insignificant, and the returns fractional only, although from the very small area planted with rice, a more than averagely good crop was obtained. The sugar crop has been dealt with in an advance Report, and so needs no further comment; but potatoes, arrowroot, tobacco, and coffee all show large decreases in output, whilst hay crops embrace less than one-third of their usual acreage. Green fodder, on the other hand, by the inclusion of some 15,000 acres of sugar-cane for this season thus utilized, increased by about 11,000 acres. Of fruit, vines decreased one-fifth in area and one-half in production. Bananas, from a very slightly smaller area than obtained in 1901, also only returned one-half the yield, whilst pineapples and oranges, from slightly increased areas, yielded approximately one-third less than in 1901. Cotton, which had gone out of cultivation—actually for three years, and practically for five years—was again attempted to the extent of 8 acres, from which less than half an average crop was obtained.

#### IRRIGATION.

The intensely dry season of 1902 forced the question of the need for irrigation upon the attention of agriculturalists in a very emphatic manner. The experience of this cycle of bad seasons has plainly shown that much can be done in the way of artificially watering crops, even without an expensive and extended system of irrigation, although in connection with the sugar industry in the Bundaberg district and at Ayr, on the Burdekin, large and well-considered schemes have been adopted, and considerable sums of money spent in providing and applying water to the cane crops. These instances are, however, further referred to in the section of this report devoted to sugar production.

There was more than twice the area returned as under irrigation in 1902, compared with the previous year—namely, 14,344 acres, instead of 6,526 acres. The number of acres irrigated during each of the past 10 years is shown in the following table:

#### D.

Year.		Acres Irrigated.	Year.		Acres Irrigated.
1893	...	5,287	1898	...	9,648
1894	...	5,846	1899	...	6,311
1895	...	6,447	1900	...	6,969
1896	...	6,395	1901	...	6,526
1897	...	6,647	1902	...	14,344

Commencing with an area of 5,287 acres irrigated in 1893, it gradually increased, except for a slight recession in 1896, to 6,647 in 1897; springing in 1898 to 9,648 acres, when it again fell some 3,000 acres.

Full details as to the operations for 1902 will be found in the following table:—

## D a.

Petty Sessions District.	Number of Irrigators.	Acres Irrigated.	Original Source of Water Supply.	Means Employed for Procurement and Utilisation.	Crops Treated.	Remarks by Irrigator.
Adavale ...	1	3	Blackwater Creek	Pumping, horse, drains ...	Fruit, vegetables.	
Allora ...	7	171	Dalrymple, King's Creek	Gravitation, pumping, steam, drains	Wheat, maize, potatoes, lucerne.	
Aramac ...	4	17	Bore ...	Gravitation, drains ...	All crops.	
Ayr ...	32	4,070	Wells, lagoons ...	Pumping, steam, horse ...	Sugar-cane, maize.	
Banana ...	1	2	River ...	Pumping, windmill ...	Fruit and vegetables.	
Barcaldine ...	15	772	Bore, creek ...	Gravitation, drains ...	Oats, wheat, barley, fruit, vegetables, couch grass.	
Beaudesert ...	1	4	River ...	Pumping, steam, drains ...	Vegetables.	
Biggenden ...	1	1	Creek ...	Gravitation ...	Vegetables.	
Blackall ...	7	18	Bore, Barcoo River, lagoons	Horse pump, McCaughey's lift, drains	Gardens, vegetables.	
Bollon ...	2	8	Wallum Creek, bore	Gravitation, pumping, drains	Lucerne, fruit, vegetables.	
Bowen ...	26	201	Don River, wells ...	Pumps, steam, windmills, pipes	Fruit and vegetables.	
Brisbane ...	7	28	Kedron Brook, Cabbage-tree Creek, wells	Pumping, windmills, drains, pipes	Vegetables.	
Bundaberg ...	17	2,906	Wells, Burnett River	Pumping, steam, windmills, pipes, trenches, flooding	Sugar-cane, maize, fruit, vegetables.	
Burke ...	3	13	Lagoons ...	Pumps, California, horse, fluming	Vegetables and fruit.	
Caboolture ...	1	1	Spring Creek ...	Pumping, steam, hose ...	Lucerne.	
Cairns ...	2	11	Barron River, creek	Pumping, steam, drains, pipes	Vegetables, various crops.	
Camooweal ...	1	1	Main Creek ...	Hot air pump, hose ...	Vegetables.	
Cape River ...	5	18	Cape River, Betts' Creek	Pumping, horse, windmills, trenches	Fruit trees.	
Charleville ...	5	17	Warrego River, bore	Pumping, steam, horse, drains, pipes	Barley, oats, sorghum, vegetables, fruits.	
Charters Towers ...	10	35	Wells ...	Pumping, steam, horse, drains, pipes	Oranges, fruit trees, vegetables.	
Clermont ...	2	4	Wells ...	Pumping, horse, windmills, trenches	Fruit and vegetables.	
Cleveland ...	6	16	Wells ...	Pumping, horse, windmills, pipes, hose	Fruit and vegetables.	
Cook ...	4	11	Spring Creek, wells	Gravitation, pumping, horse, trenches	Maize, oranges, vegetables.	
Cunnamulla ...	3	3,200	Bore ...	Gravitation, drains ...	Wheat, oats, barley, lucerne, artificial and natural grasses.	
Dalby ...	1	2	Condamine River ...	Pumping, steam, piping ...	Maize and pumpkins.	
Dugandan ...	2	13	Warrill and Teviot Creeks	Pumping, steam, horse, pipes	Lucerne, maize.	
Emerald ...	3	16	River ...	Pumping, steam, piping ...	Fruit, vegetables.	
Esk ...	2	45	Brisbane River, wells	Pumping, steam, pipes, hose	Lucerne, maize, panicum, vegetables.	
Etheridge ...	3	8	Gilbert River, wells	Pumping, steam, windmills, pipes	Maize, fruit, vegetables.	
Gatton ...	8	174	Blackfellow and Lockyer Creeks	Pumps, hydraulic windmills, pipes, hose	Maize, lucerne, fruit, vegetables.	
Gayndah ...	1	1	River ...	Pumping, trenches ...	Fruit.	
Gin Gin ...	2	6	Burnett River, Creek	Pumps, steam, hand, pipes ...	Lucerne, vegetables.	
Gympie ...	5	25	Mary River, Pie and Eel Creeks	Pumps, steam, horse, gravitation, drains	Maize, oats, vegetables.	
Harrisville ...	4	59	Warrill Creek ...	Pumps, steam, pipes, hose ...	Wheat, lucerne, panicum.	
Highfields ...	1	5	Wells ...	Pumps, steam, pipes, hose ...	Lucerne.	
Hughenden ...	7	54	Wells ...	Pumping, steam, horse, races	Lucerne, sorghum, fruit, vegetables.	
Hungerford ...	2	136	Gravitation, bore	Gravitation, drains ...	Wheat, oats, lucerne, sorghum.	
Ingham ...	1	70	Herbert River ...	Pumping, steam, trenches ...	Sugar-cane.	
Ipswich ...	6	44	Bremer and Brisbane Rivers, Warrill Creek	Pumps, steam, horse, windmills, gravitation, drains, hose	Maize, lucerne.	
Isisford ...	1	1	Thomson River ...	Pumping, windmill, trenches	Market garden.	
Killarney ...	3	29	Condamine River, Spring Creek	Pumping, steam, horse, drains, hose	Barley, lucerne, potatoes.	
Longreach ...	18	35	Thomson and Darr Rivers	Pumping, windmill, horse, pipes, drains	Fruit, vegetables.	
Mackay ...	6	496	Pioneer River, wells, creeks	Gravitation, pumping, steam, flooding, drains, pipes	Sugar-cane, all other crops.	
Maryborough ...	8	66	Artesian bore, wells	Hot air, hand, pumps, drains	Fruits, vegetables.	
Muttaburra ...	4	31	Bore, river ...	Gravitation, pumping, steam, drains	Wheat, lucerne, fruit, vegetables.	
Nanango ...	1	2	Well ...	Pumping, steam, pipes ...	Fruit.	
Nerang ...	6	29	Coomera, Pimpama, and Nerang Creeks	Steam pumps, windmill, drains, pipes	Maize, lucerne, fruit gardens.	
Norman ...	1	40	Smithburne River	Pumping, steam, pipes ...	Maize, potatoes, fruit, vegetables.	
Ravenswood ...	2	5	Wells ...	Hot air, horse, pumps, drains, pipes	Fruit, vegetables.	
Redcliffe ...	1	25	Pine River ...	Pumping, steam, pipes ...	Oats, lucerne, vegetables.	
Rockhampton ...	30	769	Fitzroy River, wells, lagoons	Gravitation, pumps, steam, horse, drains	Maize, lucerne, fruit, vegetables.	
Roma ...	2	34	Bore ...	Gravitation, drains ...	Wheat, barley, oats, maize.	
Rosewood ...	2	23	Creek ...	Pumping, steam, drains, hose	Lucerne.	
St. George ...	11	46	Balonne River, wells	Pumps, steam, horse, drains, pipes	Wheat, barley, lucerne, fruit.	
South Brisbane ...	4	28	Main Creek, Broadwater	Pumps, steam, horse, drains, pipes	Market gardens, fruit.	
Stanhope ...	6	27	Quarpot, 13-mile Creeks, and springs	Gravitation, pumps, steam, drains	Fruit, vegetables.	
Taroom ...	1	2	Dawson River ...	Pumping, windmill, pipes ...	Fruit.	
Thargomindah ...	1	1	Toompine Creek ...	Gravitation, drains ...	Fruit, vegetables.	
Toowoomba ...	6	168	Bore, Gowrie and Westbrook Creeks	Pumps, steam, windmill, drains, pipes	Barley, maize, rape, lucerne.	
Townsville ...	41	273	River, wells, creeks	Pumps, steam, horse, drains, trenches	Fruit, vegetables.	
Warwick ...	4	10	Swan and Emu Creeks	Pumping, steam, drains ...	Vegetables.	
Woodford ...	4	18	Lagoons, creeks ...	Pumping, steam, hose ...	Oats, maize, panicum, lucerne.	
Total ...	372	14,344				

Irrigation to a greater or less extent was carried on in 62 districts last year, an increase of 17 districts on the 45 of 1901. There were 372 persons who availed themselves of the aid of irrigation against 249 in the previous year.

The sources of supply were nearly as varied as the methods of procurement and utilisation—Nature, entirely unaided, being drawn upon in many cases—rivers, creeks, and lagoons yielding their stores; whilst in others, bores and wells were put down and dams constructed to supply the much-required fluid.

In cases where the head of water did not admit of its application by direct gravitation, the pump in some form or other was almost invariably employed to raise it to the necessary elevation, but the methods adopted and powers employed to work them were varied in the extreme. Steam was by far most frequently in evidence, but the windmill, horse-power, and the hydraulic ram were also employed. Trenches, pipes, and hose were for the most part used for distribution, and in few instances only was the land thoroughly flooded. No doubt the supply of water would only in rare instances admit of this course being pursued.

Passing any further reference to what has been accomplished at Ayr and Bingera, which, as previously stated, are dealt with under sugar cultivation, the district with the next largest area cultivated and irrigated was Cunnamulla, where 3,200 acres were so treated. The mention of this district imports into the matter an entirely different phase of the subject. It has for some time been a debatable question as to whether, and if so, to what extent, bore water could be utilized as an aid to cultivation. A satisfactory answer to this involved most momentous issues for a very large area of the Western portion of the State. The two points upon which disputants were chiefly at issue were: Was the supply from a bore sufficient to meet the needs of any considerable area? Was the quality of the water suited to encourage the growth of crops? To answer the last question first, it was conclusively proved that in some instances the water was charged with such minerals that, if applied with frequency, it would certainly prove deleterious to vegetation. On the other hand, in many instances, bore water has proved by practice to possess no such objectionable qualities, and has been used now for considerable periods with marked success. As to the quantity, there is little doubt that no sufficient supply of artesian water could be obtained to thoroughly irrigate very large areas; but sufficient has been accomplished to show that very considerable service can be rendered, not only in supplying vegetables for the use of the inhabitants of the drought-parched areas, but also in assisting to provide feed and pasture for at least the more valuable of the animals in the vicinity, and it is quite certain that very much more could be done in this direction than has as yet been attempted. In five of the Western districts—namely, Aramac, Cunnamulla, Hungerford, Muttaburra, and Roma—15 persons cultivated 3,418 acres with the aid of artesian water alone; whilst in four other districts—Barcaldine, Blackall, Bollen, and Charleville—29 persons cultivated a further area of 815 acres, in the irrigation of some of which bore water was also used, but in these cases other sources of supply were also drawn upon. The area comprised by the Logan, East and West Moreton, and Esk, provided with numerous rivers, creeks, and lagoons, might have been thought to afford a fair field for irrigating, but only 54 persons availed themselves of this aid to agriculture, cultivating between them by this means 507 acres only. On the Downs, although the drought was severely felt, practically destroying the wheat crop, but little was attempted in the way of irrigation, for in that area and including the Stanthorpe district only 412 acres were irrigated by 28 proprietors.

The crops irrigated were of many varieties, covering nearly the whole field of Queensland agriculture, although grain crops were not treated to any considerable extent. It is impossible to say to what extent food for sheep and cattle can be raised by means of irrigation, but a carefully conducted experiment made in New South Wales is stated to have proved conclusively that 75 sheep could be maintained in condition on the produce of one acre of irrigated land, the trial extending for a period of several months.

In California, too, a cultivated area, frequently irrigated, forms part of nearly all holdings, and pastoralists are obliged to provide for artificially feeding their stock for some weeks in each year.

#### WHEAT.

This crop was so nearly a complete failure that any extended remarks would be out of place; for the sake of continuity the usual tables are appended. On some occasions, when the area for grain has been greatly reduced owing to attack of rust, there has been a largely increased acreage mown for hay, and the crop has not been entirely lost, but there was no such compensation in 1902. The area and the produce of both hay and grain for each of the last five years were as follow:—

Year.	HAY.			GRAIN.		
	Acre.	Tons.		Acre.	Bushels.	
1898...	2,664	2,424	...	46,219	607,012	
1899...	26,047	33,891	...	52,527	614,414	
1900...	8,019	9,337	...	79,304	1,194,088	
1901...	9,719	15,096	...	87,232	1,692,222	
1902...	867	1,049	...	1,880	6,165	

There were 62,850 acres planted with this cereal. Of this, 60,103 produced absolutely no result, and the land became fallow; 867 acres were mown for 1,049 tons of hay; and 1,880 acres were reaped for 6,165 bushels of grain. In 1901 nearly 1,750,000 bushels were obtained. The cause of failure was an almost total absence of rain throughout the wheat season, but especially at the time of planting, so that practically none of the seed sown even germinated. On the small area returning a crop there was practically no attack of rust, but, strangely enough, the fractionally small area (5 acres) so affected gave an average return nearly three times better than the rest of the crop.

The following table shows the results in detail of the crop for the past 10 years:—

## E a.

## WHEAT (GRAIN) RETURNS.

## RETURN FOR TEN YEARS.

		FREE FROM RUST.			AFFECTED WITH RUST.			TOTAL.		
		Area.	Produce.	Average per Acre.	Area.	Produce.	Average per Acre.	Area.	Produce.	Average per Acre.
		Acre.	Bushels.	Bushels.	Acre.	Bushels.	Bushels.	Acre.	Bushels.	Bushels.
1893	...	24,632	370,667	15·05	3,779	42,427	11·23	28,411	413,094	14·54
1894	...	20,596	422,973	20·54	7,395	122,212	16·53	27,991	545,185	19·48
1895	...	10,549	109,947	10·42	2,401	13,683	5·70	12,950	123,630	9·55
1896	...	34,164	598,052	17·51	506	3,202	6·33	34,670	601,254	17·34
1897	...	33,856	632,883	18·69	23,932	376,410	15·73	57,788	1,009,293	17·47
1898	...	43,342	573,000	13·22	2,877	34,012	11·82	46,219	607,012	13·13
1899	...	46,917	550,702	11·74	5,610	63,712	11·36	52,527	614,414	11·70
1900	...	79,227	1,193,193	15·06	77	895	11·62	79,304	1,194,088	15·06
1901	...	77,162	1,516,779	19·66	10,070	175,443	17·42	87,232	1,692,222	19·40
1902	...	1,875	6,122	3·27	5	43	8·60	1,880	6,165	3·28
Ten Years	...	372,320	5,974,318	16·05	56,652	832,039	14·69	428,972	6,806,357	15·87

The average yield per acre for 1902 was for the 5 acres affected with rust 8.60 bushels; for the 1,875 acres free from rust, 3.27 bushels; and for the total crop, 3.28 bushels per acre.

In New South Wales the wheat crop also proved a failure, although, in consequence of the much larger area cultivated a considerable quantity of grain was garnered; yet it amounted to hardly more than one-tenth of the usual crop, and returned an average of 1.2 bushels per acre only, whilst in South Australia an average of 5.98 bushels was obtained, the best for the past five years; and in Western Australia, where a large proportion of the land under crop is sown with wheat, 85,276 acres yielded 881,708 bushels, an average of 10.34, which is a fairly normal ratio for that State.

The following table shows the districts in which wheat was grown last year, together with full particulars as to the crop:—

## E b.

Petty Sessions Districts.	RESULTS.									
	FREE FROM RUST.			AFFECTED WITH RUST.			TOTAL.			
	Area.	Produce.	Average per Acre.	Area.	Produce.	Average per Acre.	Total Extent of Land Reaped for Grain.	Produce.	Average per Acre.	
SOUTHERN.										
<i>East of Main Range—</i>										
Crow's Nest (part of) ...	...	13	84	6·46	...	...	...	13	84	6·46
Gin Gin ...	...	3	60	20·00	...	...	...	3	60	20·00
Gatton ...	...	...	...	5	43	8·60	5	43	8·60	
Gayndah ...	...	2	34	17·00	...	...	...	2	34	17·00
Total	...	18	178	9·89	5	43	8·60	23	221	9·61
<i>West of Main Range—</i>										
Allora ...	...	1	24	24·00	...	...	...	1	24	24·00
Crow's Nest (part of) ...	...	18	86	4·78	...	...	...	18	86	4·78
Cunnamulla ...	...	5	60	12·00	...	...	...	5	60	12·00
Dalby ...	...	126	344	2·73	...	...	...	126	344	2·73
Highfields ...	...	68	216	3·18	...	...	...	68	216	3·18
Killarney ...	...	478	1,177	2·46	...	...	...	478	1,177	2·46
Roma ...	...	190	32	0·17	...	...	...	190	32	0·17
Stanthorpe ...	...	33	420	12·73	...	...	...	33	420	12·73
Texas ...	...	12	100	8·33	...	...	...	12	100	8·33
Toowoomba ...	...	2	40	20·00	...	...	...	2	40	20·00
Warwick ...	...	923	3,433	3·72	...	...	...	923	3,433	3·72
Total	...	1,856	5,932	3·20	...	...	...	1,856	5,932	3·20
Total Southern	...	1,874	6,110	3·26	5	43	8·60	1,879	6,153	3·27
CENTRAL.	...	...	...	...	...	...	...	...	...	...
NORTHERN.										
Mackay ...	...	1	12	12·00	...	...	...	1	12	12·00
Total Northern	...	1	12	12·00	...	...	...	1	12	12·00
Total State	...	1,875	6,122	3·27	5	43	8·60	1,880	6,165	3·28

Although fair, indeed good returns, were obtained from very small areas in one or two places, the general results speak eloquently as to the general failure of the crop.

The area mown for hay in each district is also shown in the following table:—

## E c.

## WHEAT (HAY) RETURNS, 1902.

Petty Sessions Districts.	FREE FROM RUST.			AFFECTED WITH RUST.			TOTAL.											
	Area.	Produce.	Average per Acre.	Area.	Produce.	Average per Acre.	Area.	Produce.	Average per Acre.									
SOUTHERN.																		
<i>East of Main Range—</i>																		
Beaudesert ... ... ... ...	2	3	1·50	...	9	0·64	2	3	1·50									
Crow's Nest (part of) ... ... ... ...	5	6	1·20	14	...	...	19	15	0·79									
Dugandan ... ... ... ...	20	71	3·55	2	4	2·00	22	75	3·41									
Gatton ... ... ... ...	122	185	1·52	14	18	1·29	136	203	1·49									
Goodna ... ... ... ...	2	3	1·50	...	...	...	2	3	1·50									
Laidley ... ... ... ...	25	22	0·88	...	...	...	25	22	0·88									
Marburg ... ... ... ...	...	...	...	4	7	1·75	4	7	1·75									
Maroochy ... ... ... ...	2	2	1·00	...	...	...	2	2	1·00									
Maryborough ... ... ... ...	2	1	0·50	...	...	...	2	1	0·50									
Nanango ... ... ... ...	15	29	1·93	...	...	...	15	29	1·93									
Nerang ... ... ... ...	5	11	2·20	...	...	...	5	11	2·20									
Rosewood ... ... ... ...	14	21	1·50	...	...	...	14	21	1·50									
Total ... ... ... ...	214	354	1·65	34	38	1·12	248	392	1·58									
<i>West of Main Range—</i>																		
Crow's Nest (part of) ... ... ... ...	15	12	0·80	...	...	...	15	12	0·80									
Cunnamulla ... ... ... ...	2	4	2·00	...	...	...	2	4	2·00									
Dalby ... ... ... ...	2	2	1·00	...	...	...	2	2	1·00									
Goondiwindi ... ... ... ...	199	139	0·70	...	...	...	199	139	0·70									
Highfields ... ... ... ...	47	84	1·79	16	16	1·00	63	100	1·59									
Hungerford ... ... ... ...	76	105	1·38	...	...	...	76	105	1·38									
Inglewood ... ... ... ...	9	16	1·78	...	...	...	9	16	1·78									
Killarney ... ... ... ...	3	1	0·33	...	...	...	3	1	0·33									
St. George ... ... ... ...	18	20	1·11	...	...	...	18	20	1·11									
Stanthorpe ... ... ... ...	55	54	0·98	...	...	...	55	54	0·98									
Texas ... ... ... ...	55	56	1·02	...	...	...	55	56	1·02									
Toowoomba ... ... ... ...	15	12	0·80	11	8	0·73	26	20	0·77									
Warwick ... ... ... ...	36	20	0·56	...	...	...	36	20	0·56									
Total ... ... ... ...	532	525	0·99	27	24	0·89	559	549	0·98									
Total Southern ... ... ... ...	746	879	1·18	61	62	1·02	807	941	1·17									
<i>CENTRAL.</i>																		
Barcaldine ... ... ... ...	36	71	1·97	...	...	...	36	71	1·97									
Muttaburra ... ... ... ...	6	9	1·50	...	...	...	6	9	1·50									
Total Central ... ... ... ...	42	80	1·90	...	...	...	42	80	1·90									
<i>NORTHERN.</i>																		
Herberton ... ... ... ...	17	24	1·41	...	...	...	17	24	1·41									
Mackay (less Nebo collection) ... ... ... ...	1	4	4·00	...	...	...	1	4	4·00									
Total Northern ... ... ... ...	18	28	1·56	...	...	...	18	28	1·56									
Total State ... ... ... ...	806	987	1·22	61	62	1·02	867	1,049	1·21									

## BREADSTUFFS.

Wheat—and its product, flour—may be accepted as the breadstuffs of Britain and her self-governing colonies, and one of the first desiderata for a civilised community is the production of this, so important an item of its consumption. In 1901, Queensland attained almost half-way to this end, producing 48 per cent. of its consumption. The imports, gross and net, and the exports of breadstuffs for last year were as follow:—

## E d.

## BREADSTUFFS.

ITEM.	IMPORTED.		EXPORTED.		NET IMPORTS.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
					£	£
Flour (centals) ... ... ... ...	701,626	318,982	2,194	1,273	699,432	317,709
Wheat (centals) ... ... ... ...	125,663	44,114	500	124	125,163	43,990
Biscuits (lb.) ... ... ... ...	459,546	16,117	34,654	703	424,892	15,414
Total ... ... ... ...	...	379,213	...	2,100	...	377,113

It will be seen that in 1902 the value of the net imports amounted to £377,113, against £291,377 in the previous year, a decrease of £85,736. The net imports of the past three years are compared in the following statement:—

E e.

	1900.	1901.	1902.
Flour ... 649,560 centals = £269,678		618,920 centals = £238,729	699,432 centals = £317,709
Wheat ... 433,528 " = 113,426		163,764 " = 43,605	125,163 " = 43,990
Biscuits ... 154,972 lb. = 6,243		226,871 lb. = 9,043	424,892 lb. = 15,414
	<hr/> £389,347	<hr/> £291,377	<hr/> £377,113

It will be seen that the failure of the wheat crop was to the full extent reflected in the work of the flour mills, the wheat imported in 1902 being considerably less in quantity, although of almost exactly the same value as in 1901. Some £6,000 worth more biscuits were imported, a large relative if small actual increase. Substantially the whole increase was in flour—namely: From 618,920 centals in 1901, to 699,432 centals in 1902, the value in the latter year being £78,980 greater than in the former. The value of imported flour per cental at the import values for each of the last three years was:—1900, 8s. 3 $\frac{3}{4}$ d.: 1901, 7s. 8 $\frac{1}{2}$ d.; and 1902, 9s. 1d.; and the value of imported wheat per cental on the same basis as flour for the same period was 5s. 2 $\frac{3}{4}$ d., 5s. 4d., and 7s. 0 $\frac{1}{4}$ d. respectively.

The following statement shows for each of the last five years the importation of wheat into Queensland, flour being converted into wheat on the usual basis:—

**E f.**  
**WHEAT IMPORTS.**

Year.	Imported.	Grown in Queensland.	Total.
	Net Bushels.	Bushels.	Bushels.
1897	1,932,216	1,009,293	2,941,509
1898	1,925,405	607,012	2,532,417
1899	2,326,592	614,414	2,941,006
1900	2,346,447	1,194,088	3,540,535
1901	1,820,240	1,692,222	3,512,462
1902	1,957,205	6,165	1,963,370

NOTE :—For the purposes of this Statement the flour imported has been converted into wheat on the basis of 1 cental of flour =  $2\frac{1}{2}$  bushels wheat.

The stocks in hand at the end of 1902 were admitted practically "nil," special arrangement being made at the commencement of 1903 to import the requisite grain for seed for the ensuing sowing, the heavy importations and the good crops of 1900 and 1901 resulting in the forcing forward into 1902 of the large supplies held at the beginning of that year, hence the apparently small consumption of bread-stuffs in 1902, if only the year's transactions are taken as the basis of the annual requirements.

The flour mills in the State having the heavy stock held over from 1901, and of which mention has already been made, to work upon, passed more wheat through their rollers than during any other of the last five years. The following table furnishes full particulars of the results for 1902:—

E.g.

District.	Number of Establish- ments.	Number of Hands Em- ployed.	Number of Stones.	Number of Rollers.	Wheat Treated.	FLOUR MADE.		MEAL MADE.		BRAN AND POLLARD.	
						Tons.	Value.	Tons.	Value.	Bushels.	Value.
Metropolitan ... ...	6	87	Pairs.	Sets.	Bushels.	£	£	70	722	440,510	30,461
Allora and Warwick...	3	23	7	39	479,833	9,526	92,768	37	391	285,400	13,812
Toowoomba ... ...	4	42	...	25	294,419	5,838	50,718	35	310	312,826	14,650
Elsewhere ... ...	5	31	...	43	340,712	6,908	55,252	56	721	224,546	16,238
	18	183	10	140	1,338,346	26,578	241,675	198	2,144	1,263,282	75,161

At some of the above establishments but little wheat is treated, the factories being principally devoted to treating other grain. Information respecting Grain Mills will be found in the Statistical Register.

There were 18 mills in operation last year, the same as in 1901. The capital invested in them was, for land and premises, £94,533 ; and for machinery, £63,965. They gave employment to 183 hands ; the grinding appliances comprising 140 sets of steel rollers and 10 pairs of stones ; the latter are rapidly giving place to the roller, and are now used chiefly by mills grinding a variety of grain, those producing flour only having generally adopted the rollers.

There were 1,338,346 bushels of wheat treated, from which 26,578 tons, or 531,560 centals of flour were obtained, of a returned value of £241,675, equal to 9s. 1d. per cental. There were also 198 tons, or 3,960 centals of meal, valued at £2,144, besides 1,263,282 bushels of bran and pollard, worth £75,161.

State aid was granted towards the establishment of 2 of these mills, and the conditions of the loans with respect to these at the end of the year were as follows:—

Number of mills to which advances have been made	...	...	...	...	...	£	s.	d.
Amount advanced up to 31st December, 1902	...	...	...	...	...	3,488	0	0
Indebtedness to State on 31st December, 1902	...	...	...	...	...	3,557	6	10
Including interest due, but not paid	...	...	...	...	...	114	1	8
And interest accrued, but not yet due	...	...	...	...	...	1	5	2

## BARLEY.

The drought had a most disastrous effect on the barley as on wheat, the area from which returns were obtained in 1902—namely, 1,573 acres—was less than one-tenth of that for 1901. Of the 1,573 acres sown, 430 acres were reaped for grain, 50 acres were mown for hay, and 1,093 acres were cut for green forage. There were, however, 9,759 acres sown, which yielded no results whatever, and have been recorded fallow.

The following table compares these figures with those for 1901:—

F.

		1901.	1902.
		Acres.	Acres.
Reaped for Grain	...	11,775	430
Mown for Hay	...	310	50
Cut for Green Food	...	4,704	1,093
		16,789	1,573

Of the 16,789 acres sown in 1901, 11,775 acres, or 70 per cent. of the total, were reaped for grain; the ratio in 1902 was 27 per cent.

The average yield of grain obtained from the small area reaped was but little more than one-third of the results obtained in 1901. The following table furnishes information on this point:—

F a.

Year.	Area for Grain.	Produce.	Average Produce per Acre
			Bushels.
1901	11,775	277,037	23·53
1902	430	3,595	8·36
Increase in 1902	...	...	...
Decrease in 1902	11,345	273,442	15·17

In 1901, 277,037 bushels were obtained from 11,775 acres, or an average of 23.53 bushels to each acre; last year 430 acres returned 3,595 bushels, or an average of 8.36 bushels per acre.

Still confining attention to the area reaped for grain, barley is returned under two heads—"Malting" and "Other Varieties." Taking the four districts in which the area reaped exceeded 20 acres, the results obtained from both varieties are shown in the following table:—

F b.

RETURN showing the AREA under BARLEY, exclusive of HAY and GREEN CROPS, and the YIELD of GRAIN obtained therefrom, during the Year 1902.

District.	Malting Grain.			Other Varieties Grain.		
	Area.	Produce.	Average per Acre.	Area.	Produce.	Average per Acre.
			Bushels.			Bushels.
Cunnamulla	...	...	...	28	168	6·00
Killarney	62	608	9·81	2	11	5·50
Toowoomba	31	360	11·61	20	48	2·40
Warwick	64	640	10·00	209	1,474	7·05
All Other Districts	6	141	23·50	8	145	18·13
Total	163	1,749	10·73	267	1,846	6·91

## MALTING BARLEY.

The chief object of cultivating barley is for the conversion of the grain into malt for the brewers' use, and in 1901 three-fifths of the total area was planted with grain of that variety, although last year of the very small total acreage—430 acres—only 163, or 38 per cent., were sown with malting barley; the remainder, 267 acres, being planted with varieties not suited to that purpose. The former area, however, returned from the less acreage nearly as much produce—namely, 1,749 bushels, against 1,846 bushels for the latter, or averages per acre of 10.73 and 6.91 bushels respectively.

The malting of one year is mainly of grain grown in the previous one, consequently the crop for 1901 was malted in the following year. There not only was in 1902 more malt made than ever before, but more malt was made from Queensland barley, although, owing to the expansion of the industry, the proportion to the total quantity manufactured was not quite so great. Particulars for the last five years are furnished in the following table:—

F c.

Year.	Made from Imported Barley.	Made from Queensland Barley.	Total Malt Made.
			Bushels.
1898	12,278	20,351	32,629
1899	42,851	19,420	62,271
1900	15,337	57,393	72,730
1901	1,000	69,000	70,000
1902	9,500	75,500	85,000

In 1901, there were 70,000 bushels of malt made in the State, of which 69,000 bushels were the produce of barley grown here; in 1902, the corresponding figures were 85,000 bushels and 75,500 bushels respectively. Thus, in the latter year, Queensland supplied 89 per cent. of her own demand of grain for malting. The malt home made, however, by no means represents the requirements of the State for that article. The relation of Queensland malt made last year to the total demand is shown in the following statement:—

Malted in Queensland, 1902	...	...	...	85,000 bushels
Imported, less exported, 1902	...	...	...	117,134 "
Total	...	...	...	202,134 "

So that Queensland malt only met 42 per cent., and Queensland malt made from Queensland barley 37 per cent. of the State needs for that article. Whatever malting is carried on during 1903 must be upon grain almost entirely imported, so that the foregoing ratios are the best to which we have yet attained.

Seeing that Queensland malting is carried on in the centre of the barley districts, and that the imported grain has to be freighted by train 100 miles for treatment, it presents a strange anomaly to the uninitiated that, taking 1 bushel of malt to represent 1 bushel of barley, of the 193,538 bushels harvested in 1901 only 75,500 were malted, whilst a further supply of 9,500 bushels were required and imported even to meet the demand for malting, without considering the 117,134 bushels represented by the imported malt. The crop for the current year appears from all accounts likely to greatly exceed that for 1901, whilst the demand for malt could only absorb about 200,000 bushels.

In any case, an outside market will have to be looked for, but unless the maltsters and farmers can better agree in the future than in the past as to quality and price, an increased proportion of this crop will have to be sent elsewhere or utilised for other purposes, whilst the practice of importing barley and malt in large quantities is likely to continue.

The relation between home produced and imported malt for a series of years is shown in the following table:—

	Malted in Queensland. Bushels.	F d.				Malt Imported. Bushels.
		1893	1894	1895	1896	
1893-94 (financial)	... 1,408	1893	...	...	...	121,607
1894-95 ditto	... 4,537	1894	...	...	...	127,188
1895-96 ditto	... 12,988	1895	...	...	...	153,843
1896-97 ditto	... 14,400	1896	...	...	...	147,474
1897-98 ditto	... 34,589	1897	...	...	...	156,613
1898 (calendar)	... 32,629	1898	...	...	...	129,811
1899 ditto	... 62,271	1899	...	...	...	127,469
1900 ditto	... 72,730	1900	...	...	...	134,098
1901 ditto	... 70,000	1901	...	...	...	121,424
1902 ditto	... 85,000	1902	...	...	45,507 centals	= 119,755

The increased demand for malt has been more than met by the Queensland production, this also having trenced to some extent on the imported article. The quantity produced in the State in 1902 exceeded the output of the next best year by 12,270 bushels, whilst the quantity imported was less than in any year since 1892.

The quantity of beer brewed and malt used in Queensland during each of the last five years was:—

	Beer.			Malt.	
	1898	1899	1900	1901	1902
	... 5,028,007 gallons	... 5,422,194 "	... 5,738,190 "	... 5,325,314 "	... 185,310 bushels
					181,092 "
					192,668 "
					188,100 "
					170,610 "

\* Including waste 260,038 gallons.

#### OTHER BARLEY.

There were 267 acres planted in 1902, against 4,957 in 1901, and the grain produced was 1,846 bushels, and 83,499 bushels each year respectively, giving average yields of 6.91 in 1902, and 16.84 in the previous year. Fuller information can be obtained by reference to tables Nos. X. to XIV. in the Appendix.

#### MAIZE.

There were 89,923 acres of maize in 1902, from which 1,033,329 bushels of grain were harvested, an average yield of 11.49 bushels to each acre, besides which there were 17,809 acres sown, which never germinated. The area and production for each of the last five years were as follow:—

	Year.	G.			Average per Acre.
		Acres.	Bushels.	Bushels.	
1898	...	102,835	2,252,481	21.90	
1899	...	110,489	1,965,598	17.79	
1900	...	127,974	2,456,647	19.20	
1901	...	116,983	2,569,118	21.96	
1902	...	89,923	1,033,329	11.49	

The area, production, and average yield in 1902 were less than in any other year of the decade, 1893-1902. A small portion of the decrease was due to a greater area being cut for green forage, induced, no doubt, not only by the uncertainty of result if left to mature, but also to the increased value attached to the crop as a forage plant. The following table shows the increased acreage thus utilized in 1902:—

G a.

Year.	Green Fodder.		Grain.		Average Produce per Acre.
	Acres.	Acres.	Bushels.	Bushels.	
1901	10,501	116,983	2,569,118	21·96	
1902	21,824	89,923	1,033,329	11·49	
Increase in 1902	10,783	...	...	...	
Decrease in 1902	...	27,060	1,535,789	10·47	

Thus 21,824 acres were cut for green food last year, against 10,501 in 1901, an increase of over 100 per cent. The decrease of maize for grain was, area 27,060 acres; production, 1,535,789 bushels; average yield, 10.47 bushels.

Eighty-nine per cent. of the acreage and 78 per cent. of the production of maize is contributed by the Southern Division. Further particulars on this point are furnished in the following table:—

G b.  
MAIZE GRAIN.

District.	Acres.	Yield.	Average.	Proportion of Area to whole Area of Maize for Grain.
Southern, East	50,216	588,802	11·73	55·84
Southern, West	29,682	218,518	7·36	33·01
Total Southern	79,898	807,320	10·10	88·85
Total Central	430	5,636	13·11	0·48
Total Northern	9,595	220,373	22·94	10·67
<b>TOTAL STATE</b>	<b>89,923</b>	<b>1,033,329</b>	<b>11·49</b>	<b>100·00</b>

The average yield obtained in the Southern Division was 10.10 bushels, and from the small area in the Central Division the somewhat better return of 13.11 bushels, but in the North a return nearly equal to a fair crop for the South, although much below the average which usually obtains in the tropical coast districts.

The following table gives particulars respecting the maize crop of the last two seasons in the more important districts:—

G c.

Petty Sessions District.	Area Planted for Grain.			Yield of Grain.			Average Yield per Acre.		
	In 1901.	In 1902.	Increase or Decrease —	In 1901.	In 1902.	Increase or Decrease —	In 1901.	In 1902.	Increase or Decrease —
	Acres.	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Warwick	10,069	9,171	— 898	87,313	49,845	— 37,468	8·67	5·44	— 3·23
Laidley	8,086	7,324	— 762	174,742	52,103	— 122,639	21·61	7·11	— 14·50
Gatton	7,384	6,187	— 1,197	177,963	55,493	— 122,470	24·10	8·97	— 15·13
Hightfields	5,698	5,189	— 509	73,110	37,058	— 36,052	12·83	7·14	— 5·69
Allora	5,088	5,011	— 77	30,909	34,735	3,826	6·07	6·93	0·86
Killarney	5,285	4,989	— 296	73,731	46,475	— 27,256	13·95	9·32	— 4·63
Dugandan	7,480	4,463	— 3,017	194,056	39,130	— 154,926	25·94	8·77	— 17·17
Marburg	5,336	4,232	— 1,104	135,083	33,678	— 101,405	25·32	7·96	— 17·36
Herberton	3,875	4,040	165	159,092	92,992	— 66,100	41·06	23·02	— 18·04
Nanango	1,994	3,448	1,454	18,975	31,951	12,976	9·52	9·27	— 0·25
Toowoomba	5,030	3,013	— 2,017	57,637	31,294	— 26,343	11·46	10·39	— 1·07
Cairns	2,554	2,613	59	98,184	75,494	— 22,690	38·44	28·89	— 9·55
Crow's Nest, part of*	2,877	2,392	— 485	39,120	28,600	— 10,520	13·60	11·96	— 1·64
Crow's Nest, part of†	1,821	1,784	— 37	23,883	15,975	— 7,908	13·12	8·95	— 4·17
Nerang	2,217	2,281	64	72,861	59,078	— 13,783	32·86	25·90	— 6·96
Beaudesert	3,096	2,018	— 1,078	86,282	31,706	— 54,576	27·87	15·71	— 12·16
Redcliffe	2,653	1,846	— 807	66,224	22,320	— 43,904	24·96	12·09	— 12·87
Esk	2,376	1,724	— 652	59,969	13,684	— 46,285	25·24	7·94	— 17·30
Bundaberg	4,193	1,583	— 2,610	104,401	23,073	— 81,328	24·90	14·58	— 10·32
Childers	1,834	1,537	— 297	52,036	35,011	— 17,025	28·37	22·78	— 5·59
Rosewood	3,408	1,532	— 1,876	84,507	17,245	— 67,252	24·80	11·26	— 13·54
Harrisville	4,320	1,424	— 2,896	116,778	9,067	— 107,711	27·03	6·37	— 20·66
Gin Gin	1,817	1,194	— 623	45,461	13,045	— 32,416	25·02	10·93	— 14·09
Gympie	1,420	1,190	— 230	36,180	21,925	— 14,255	25·48	18·42	— 7·06
Logan	1,999	1,037	— 962	51,431	16,607	— 34,824	25·73	16·01	— 9·72
Tiaro	1,476	925	— 551	42,473	28,213	— 14,260	28·78	30·50	— 1·72
All other Districts	13,597	7,776	— 5,821	406,717	117,532	— 289,185	29·91	15·11	— 14·80
Total—State	116,983	89,923	— 27,060	2,569,118	1,033,329	— 1,535,789	21·96	11·49	— 10·47

\* East of Main Range. † West of Main Range.

In 1901 there were 7 districts in which the production exceeded 100,000 bushels, and 3 of these approximated twice that quantity. In no case was that volume reached last year, the record being held by Herberton with 92,992 bushels. The highest average yield was obtained at Tiaro—namely, 30.50 bushels, where the first crop was a good one, but the second crop entirely failed, followed by Cairns with 28.89 bushels per acre, and this in turn by another Southern district—Nerang—with an average of 25.90 bushels. The only other districts giving averages of more than 20 bushels were Herberton and Childers, where returns of 23.02 and 22.78 bushels per acre were obtained.

### OATS.

This is chiefly a hay crop, although a considerable area is also cut for green feed, the acreage reaped for grain rarely forms any considerable extent of the total area planted. Last year, in addition to the area from which a crop was obtained, 2,180 acres were sown with oats, but never showed above ground, and were relegated to fallow land. Particulars of oat cultivation for the past 3 years are given in the following table:—

#### H.

Oats.							1900.	1901.	1902.
Reaped for grain							Acres. 385	Acres. 1,535	Acres. 78
Mown for hay							11,442	17,167	2,619
Cut for green fodder							5,290	4,561	1,462
Total	...	...	...	...	...	...	17,117	23,263	4,159

There were 4,159 acres in 1902 which yielded a return of some kind, against 23,263 acres in 1901. Of the 4,159 acres, 2,619 were mown for hay, 1,462 were cut for forage, and 78 only were reaped for grain, against 1,535 acres so treated in 1901. In 1901, 42,208 bushels were obtained, or an average of 27.50 bushels per acre; and in 1902, 520 bushels, or an average of 6.67 bushels per acre, as will be seen from the following statement:—

#### H a.

Year.							Area for Grain.	Produce.	Average Produce per Acre.
1901							Acres. 1,535	Bushels. 42,208	Bushels. 27.50
1902							78	520	6.67
Increase in 1902							...	...	...
Decrease in 1902							1,457	41,688	20.83

The annual demand for oats and their product is rather more than 400,000 bushels. To meet the increased demand for horse and cattle food of all kinds in 1902, and the failure of the crop, considerably more than the usual quantity was imported last year. The quantity and value of oats imported in excess of exported for each of the last 4 years are as follow:—

#### H b.

Year.	Bushels.	Value.
1899	186,333	£22,744
1900	194,581	28,759
1901	135,365	18,349
1902	266,463	41,044

Oatmeal and hulled oats comprise 38 per cent. in value of the demand for this cereal as a food product in Queensland, the remainder being used as food for live stock, chiefly by horses. The following table shows the requirements of this State last year for oats or their products:—

#### H c.

	IMPORTS.		EXPORTS.		NET IMPORTS.		NET REQUIREMENTS OF STATE IN TERMS OF OATS.	
	Quantity.	£	Quantity.	£	Quantity.	£	Bushels.	£
Oats ...	108,157 centals	41,769	1,572 centals	725	106,585 centals	41,044	266,463	41,044
Oatmeal ...	15,245 cwt.	16,382	35 cwt.	60	15,210 cwt.	16,322	a76,050	16,322
Hulled Oats ...	14,114 centals	9,148	...	...	14,114 centals	9,148	a63,009	9,148
Production ...	...	...	...	...	...	...	520	b 80
	...	67,299	...	785	...	66,514	406,042	66,594

a Oatmeal and hulled oats converted into oats on the basis of 1 ton avoirdupois to each 100 bushels of oats.

b Estimated.

The value of oats used in all forms last year was £66,594.

## RICE.

The cultivation of this cereal does not appear to make any headway. Last year, of course, no progress could be expected with a crop so essentially requiring moisture for its successful cultivation, although the small area planted gave a very fair return, but at no time has this crop appeared to invite much attention.

The following table shows the extent to which rice was cultivated for each of the past 5 years:—

## I.

	Year.	Acres.	Bushels.	Average Bushels.
1898	...	863	38,133	44.19
1899	...	319	9,275	29.08
1900	...	271	6,870	25.35
1901	...	205	5,222	25.47
1902	...	38	1,093	28.76

From 38 acres in 1902 a return of 1,093 bushels was obtained, an average of 28.76 bushels to each acre; an average of 25.47 bushels was obtained in 1901, or 5,222 bushels from 205 acres.

The cultivation of rice was almost entirely confined to the northern coastal districts. The following table shows the districts in which this cereal was planted last year:—

## I.a.

District.	Position in the Colony.	Area Planted.	Quantity Produced.	Average Yield per Acre.
Logan	Southern Division, East of Main Range	3	12	4.00
Cairns	Northern " East of Coast Range	16	482	30.13
Cook	" " "	2	63	31.50
Douglas	" " "	13	440	33.85
Mourilyan	" " "	4	96	24.00
	Total	38	1,093	28.76

Three acres on the Logan represent the total area south of Mourilyan, and these proved a complete failure. At Douglas, Cook, and Cairns, averages of 33.85 bushels, 31.50 bushels, and 30.13 bushels were obtained respectively.

## RYE.

There were 451 acres under rye last year, and 1,602 in 1901. Particulars of this crop for the last 2 years are shown in the following table:—

	J.	1901.	1902.
	Acres.	Acres.	Acres.
Reaped for grain	...	246	22
Mown for hay	...	502	122
Cut for green feed	...	854	307
Total area under crop	...	1,602	451

Of the area planted in 1902, 22 acres only were reaped for grain, 122 acres being mown for hay, and 307 cut for green food.

A comparison as to the area reaped and the yield obtained for each of the past 5 years is afforded in the following table:—

## J.a.

Year.	Acres.	Yield, Bushels.	Average per Acre.
		Bushels.	
1898	299	3,874	12.96
1899	198	2,391	12.08
1900	151	1,928	12.77
1901	246	5,000	20.33
1902	22	238	10.82

Although the average yield obtained in 1902—namely: 10.82 bushels, was but little more than half that obtained in 1901, 20.33 bushels, yet it was not much less than the averages returned for the other years of the quinquennium.

## POTATOES (ENGLISH).

A reference to the tables in the Appendix will give full information respecting this crop. There were 2,899 acres planted with this tuber in 1902, from which some return was secured, besides 2,287 acres, yielding nothing whatever and compiled as fallow. From the 2,899 acres a crop of 3,257 tons was obtained, or an average of 1.12 tons to each acre. In 1901, 9,948 acres were planted, 22,402 tons obtained, or an average of 2.25 tons per acre.

The value of this crop can be measured by the imports, as shown in the following table:—

K.	Weight. Tons.	Value. £
Year.		
1898 ...	10,233	70,006
1899 ...	15,128	68,205
1900 ...	16,001	64,831
1901 ...	14,621	81,800
1902 ...	27,848	152,560

At the import value, potatoes were worth about £5 9s. 7d. per ton; so, as £152,560 were last year sent out of the State for the purchase of this vegetable, the value of the total quantity consumed during 1902 was £170,406.

The cultivation of this potato is mainly confined to the Southern Division, and principally in the eastern half. There was in 1902 nearly twice the area—534 acres—in Gatton than there was in any other district; the next largest area was Nerang, 251 acres, followed by Crow's Nest, 304 acres; Warwick, 234 acres; Highfields, 135 acres; and Logan, 101 acres; these six districts between them contributing 1,388 tons, or considerably more than one-third of the total production.

#### SWEET POTATOES.

The results respecting sweet potatoes were less unsatisfactory than those obtaining with many agricultural products. Its cultivation is practically confined to the coast district, and, to a larger extent than with most crops, is grown in the North, where the drought was least severe. There were 1,847 acres planted with sweet potatoes in 1902, against 3,390 acres in the previous year, the produce obtained being 7,165 tons in the former, and 17,128 tons in the latter year, giving average yields of 3.88 and 5.05 tons respectively.

#### SUGAR.

The experience with respect to the sugar industry of Queensland for the year 1902 has not been a gratifying one, the sugar-planter having, in common with allied primary producers, suffered heavily from the disastrous drought which has so long prevailed throughout this State, but which has now been materially mitigated.

In consequence of the dry weather the cane yielded juice of a high density, and therefore a smaller quantity was required to produce a ton of sugar, but with respect to the area cultivated and crushed and the aggregate yields of both cane and sugar the experience has been most unsatisfactory.

In 1902 the total area under cane for sugar was 85,338 acres, of which the produce of 59,102 acres was crushed, yielding 641,927 tons of cane, from which 76,626 tons of sugar were obtained.

This is somewhat less than excise duty was paid on—namely, 77,835 tons, but this latter, it has to be borne in mind, is for sugar actually manufactured during the calendar year 1902, and includes some of the product of 1901 season in the shape of second boilings of syrups and jellies. Generally these would, from year to year, balance themselves, but the 1902 season being a poor one less of these remained to be dealt with at the close of that year.

The extremely dry weather experienced during 1902 militated greatly against the success of the sugar crop, and drew attention yet more forcibly to the urgent need for irrigation. The necessity had been recognised by some even before the lesson taught by the past two seasons; and notably on the Burdekin delta, where cane has been irrigated for years past, and at Bingera, on the Burnett, schemes for the use of water artificially obtained and applied were adopted. In the former case the result was to place Ayr for the year 1902, as in 1901, at the head of the list with the most satisfactory proportionate results; whilst, unfortunately, at Bingera arrangements were not sufficiently advanced, neither was the supply of water enough, to enable any very extended areas to receive the benefits of irrigation, but practically the only crop obtained was from the watered areas, and thus sufficient was accomplished to show what could be effected by irrigation and to afford every encouragement for an extension of the scheme.

The aggregate area, mainly cultivated for sugar, to which irrigation has been applied increased from 4,490 acres in 1901 to 7,541 acres in 1902—Ayr, 3,896 acres to 4,070 acres; Bundaberg, 210 acres to 2,906 acres; Ingham, (decrease), 80 acres to 70 acres; and Mackay, 304 acres to 496 acres.

A comparison of last year's figures with those for the preceding four years is afforded by the following statement:—

Year.	Acres Cultivated.	Acres Crushed.	YIELD.	
			Tons Cane.	Tons Sugar.
1898 ...	111,012	82,391	1,542,090	163,734
1899 ...	110,657	79,435	1,176,466	123,289
1900 ...	108,535	72,651	848,328	92,554
1901 ...	112,031	78,160	1,180,091	120,858
1902 ...	85,338	59,102	641,927	76,626

The record year for sugar was 1898, when 163,734 tons were obtained, the average yield throughout the State from the 82,391 acres crushed being 1.99 tons to each acre. The acreage crushed in 1902 was 72 per cent. of the area for 1898, whilst of the tonnage of cane obtained the ratio was only 42 per cent.

Whilst the average yield of both cane and sugar to each acre crushed was very low owing to the dry season, yet, as just pointed out, from the same cause the juice of the cane attained a high degree of density, so that the average tonnage of cane required to produce 1 ton of sugar was considerably below the average.

The following statement compares the experience of each of the past five years on these points :—

Year.	TO EACH ACRE CRUSHED.			Tons of Cane to One Ton of Sugar.
	Tons of Cane.	Tons of Sugar.		
1898 ...	18·72		1·99	9·42
1899 ...	14·81		1·55	9·54
1900 ...	11·68		1·28	9·44
1901 ...	15·10		1·55	9·76
1902 ...	10·86		1·30	8·38

The average per acre of sugar made was slightly better last year than in 1900, but fell considerably short of the other three years, especially that of 1898 ; the average tonnage of cane was much less, indeed but little more than half that for the last-named year, and the reduced return as compared with 1900 was mainly caused by the much smaller area crushed.

This was not entirely due to the failure from weather, but partially to other causes. In ordinary seasons the area planted with sugar-cane for use as fodder has no bearing on the question of sugar production, but is always included in the agricultural statistics under the head of green forage. It is definitely planted for the use to which it is put, and has hitherto been of insignificant extent, amounting in 1901 to 595 acres only. During 1902 there were 15,067 acres thus put to profit, the great bulk of which was undoubtedly planted with the intention of converting the cane into sugar. The drought, however, caused such a demand for cattle feed of all kinds, and the prices ruling were so high, that growers found they could obtain a better return by the sale of the cane for fodder. This area, therefore, though excluded from the sugar acreage for 1902, may be fairly included in considering the acreage available for returns for the coming season. Train-loads of cane were frequently carried long distances. From Bundaberg and Wide Bay, where by far the largest areas were thus utilised, some of the produce came to the Brisbane district. If the additional area thus utilised during 1902, the produce of which in most cases was too small to crush, but was by no means a total loss to the farmer, had been converted into sugar, the output would have been considerably added to.

The question of the production of sugar in Australia, as in other places where the sugar-cane is cultivated, is intimately concerned with the changes now in progress with respect to the contributing of bounties by the continental countries of Europe.

Some progress in the direction required—the abolition of these bounties—has been made, and the confirmation by the various countries concerned of the recommendations arrived at by the conference held at Brussels in 1902 would afford much relief, although the attitude of Russia on the question leaves much to be desired. The Government of India has adopted the alternative of establishing a countervailing duty which Russia resents as a distinct breach of the "most favoured nation" clause of the Treaty of Commerce, and at the same time asserts that her beet sugar industry is not supported by the bounty system, refusing to so recognise the scheme adopted for regulating the placing of sugar on their own markets, which consists in part of an excise duty, the same being refunded on all exported sugar.

This matter of the European bounties is, perhaps, just at the present moment somewhat in the background, owing to the—for the time at least—more important local changes in progress with respect to cane cultivation, &c. It is not in such a document as this that the political aspect of this question should be discussed, but the presentation of a few facts with respect to the area and quantity of sugar-cane grown by white labour, as returned by the collectors of agricultural statistics, may prove of interest.

RETURNED AS GROWN AND HARVESTED BY WHITE LABOUR.

Rebate.	Petty Sessions District.	Area Crushed for Sugar.	Weight of Cane Harvested.
No. 1 at 5s. ...	Cairns and Douglas ...	501	6,643
	Ingham and Mourilyan ...	516	8,684
	Total ...	1,017	15,327
No. 2 at 4s. 8d. ...	Bowen ...	750	10,239
	Mackay ...	6,320	55,395
	Total ...	7,070	65,634
No. 3 at 4s. 4d. ...	Bundaberg and Gin Gin ...	2,077	8,661
	Childers, Maryborough, and Tiaro ...	736	4,531
	Total ...	2,813	13,192
No. 4 at 4s. ...	Logan ...	213	2,264
	Maroochy and Gympie ...	262	2,194
	Nerang ...	1	21
	Total ...	476	4,479
	Grand total ...	11,376	98,632

More than half of both area and tonnage was at Mackay, Bowen coming next with weight of cane, though the area was but little more than one-third of that returned from Bundaberg—Gin Gin. Both Mackay and Bowen are situated in No. 2 Rebate District, and consequently each ton of cane—namely, 65,634 tons, drew at the rate of 4s. 8d. per ton.

The figures thus returned vary slightly from the results shown by the excise, the tonnage upon which rebates have been paid, and the amounts so paid, as shown by that department, being as follow: No. 1 district, on 17,095 tons at 5s., £4,273 13s. 5d.; No. 2 district, on 69,899 tons at 4s. 8d., £16,345 3s. 7d.; No. 3 district, on 13,730 tons at 4s. 4d., £2,973 18s. 1d.; No. 4 district, on 4,579 tons, at 4s., £916 13s. 10d.—a total rebate on 105,303 tons of £24,509 8s. 11d. As the excise figures were made on statutory declaration, and were checked on the spot by local expert officers, whilst the returns to this office were made by the police from information supplied by growers when collecting the agricultural statistics, it is reasonable to suppose that the former are the more exact. The scale upon which the rebates are computed being on the basis of a refund not exceeding £2 per ton of manufactured sugar, it is seen that the weight of sugar grown and harvested by white labour was approximately 12,254 tons.

Agricultural statistics have for many years past been compiled so as to distinguish the production of each great financial division of the State. These are three in number, and are distinct from the rebate districts already quoted. The following table furnishes full details respecting the sugar crop of last season:—

## L.

## SUGAR RETURNS, 1902.

District.	Area for Plants.	Area Stand-over or Unproductive.	Area Crushed for Sugar.	Total Area for Sugar.	Weight of Cane.	Sugar.	Molasses.
	Acres.	Acres.	Acres.	Acres.	Tons.	Tons.	Gallons.
<i>Southern.</i>							
Bundaberg and Gin Gin ...	239	4,403	8,205	12,847	42,885	6,647	433,278
Childers, Maryborough, and Tiaro	298	4,422	4,050	8,770	21,703	189	7,600
Logan ... ... ...	8	318	213	539	2,260	...	...
Marburg and Rosewood ...	...	...	...	...	...	...	...
Maroochy and Gympie ...	20	617	328	965	2,890	279	16,000
Nerang ... ... ...	11	179	15	205	236	25	3,000
Total Southern ... ...	576	9,939	12,811	23,326	69,974	7,140	459,878
<i>Central.</i>							
Rockhampton ... ... ...	...	...	...	...	...	...	...
<i>Northern.</i>							
Ayr ... ... ...	59	1,129	3,156	4,344	49,996	5,714	135,000
Bowen ... ... ...	79	1,308	1,314	2,701	17,849	2,016	72,000
Cairns and Douglas ...	253	2,931	10,479	13,663	153,276	18,370	525,749
Ingham and Mourilyan ...	505	3,447	14,973	18,925	203,719	26,710	465,550
Mackay ... ... ...	494	5,516	16,369	22,379	147,113	16,676	559,561
Total Northern ... ...	1,390	14,331	46,291	62,012	571,953	69,486	1,757,860
Total State ... ...	1,966	24,270	59,102	85,338	641,927	76,626	2,217,738

N.B.—The molasses shown above is far short of the quantity produced, but may be taken as the quantity conserved and utilised. Many mills allow this product to run to waste.

A number of the petty sessions districts have to be grouped, to make the results between cane cut and sugar produced comparable, owing to the transfer of cane from one district to another for manufacture.

In the Southern division the production is practically confined to the Wide Bay group of districts, 6,647 tons of sugar out of 7,140 tons, or 93 per cent., being obtained in that locality. Although all the districts of the Wide Bay group are amalgamated with respect to sugar made, for all other particulars Bundaberg and Gin Gin are separated from Childers, Maryborough, and Tiaro; about two-thirds of the weight of cane cut being contributed by the former districts, the acreage of cane cut for crushing being also about two-thirds of the total area under crop; whilst in Childers-Tiaro group more cane was allowed to stand over than was actually crushed.

There was no land returned last year as utilised for the production of sugar in the Central division, the crop on the plantations at Yeppoon having mostly been cut for fodder, in which form it no doubt gave a good return to the planters.

The Northern division produces 69,486 tons, or 91 per cent., of all sugar production of the State. Of these, 26,710 tons were at Ingham-Mourilyan; 18,370 tons at Cairns-Douglas; 16,676 tons at Mackay; 5,714 tons at Ayr; and 2,016 tons at Bowen. The largest area crushed was at Mackay—namely, 16,369 acres; the much larger quantity of sugar returned at Ingham-Mourilyan being obtained from 14,973 acres only.

Throughout the State 1,966 acres were cut to supply plants—576 acres in the South, and 1,390 in the North, whilst the stand-over area was 24,270 acres, namely, 9,939 in the South, and 14,331 in the North. There were 2,217,738 gallons of molasses returned as put to profit. This, of course, does not comprise the total quantity obtained, as in many instances this by-product is simply run to waste, and no account kept as to the quantity produced. Upwards of 480,000 gallons were (last year) fed to stock,

a rather smaller quantity, 429,000 gallons, was sold chiefly for distilling, and a quantity always remains on hand, in the tanks at the mills. One mill which made sugar during 1902 was only employed in boiling seconds from reserved molasses.

Comparing the crops for the two years, 1901 and 1902, as is done in the following table, the disastrous effects of the drought at once become apparent.

L a.

Petty Sessions District.	Cultivation.			Production.					
	Area in 1901.	Area in 1902.	Increase or —Decrease in 1902.	1901.		1902.		Increase or —Decrease in 1902.	
				Area Crushed.	Sugar.	Area Crushed.	Sugar.	Area Crushed.	Sugar.
Ayr ... ... ... ...	Acres. 6,242	Acres. 4,344	Acres. —1,898	Acres. 3,827	Tons. 10,724	Acres. 3,156	Tons. 5,714	Acres. 671	Tons. 5,010
Bowen ... ... ... ...	2,275	2,701	426	1,144	1,610	1,314	2,016	170	406
Bundaberg and Gin Gin ...	24,958	12,847	—12,111	16,790	{ 36,205	{ 8,205	{ 4,050	—17,635	—29,558
Childers, Maryborough and Tiaro ...	16,832	8,770	—8,062	13,100					
Cairns and Douglas ...	13,618	13,663	45	9,741	18,882	10,479	18,370	738	512
Ingham and Mourilyan ...	19,495	18,925	—570	12,931	25,692	14,973	26,710	2,042	1,018
Logan ... ... ... ...	1,192	539	—653	781	1,159	213	189	568	970
Mackay ... ... ... ...	24,284	22,379	—1,905	17,769	24,093	16,369	16,676	1,400	7,417
Marburg and Rosewood ...	389	...	—389	328	343	...	...	328	343
Maroochy and Gympie ...	1,128	965	—163	651	831	328	279	323	552
Nerang ... ... ... ...	767	205	—562	545	629	15	25	530	604
Rockhampton ... ... ...	851	...	—851	553	690	...	...	553	690
Totals, 1901 ... ...	112,031	...	...	78,160	120,858	...	...	...	...
Totals, 1902 ... ...	...	85,338	...	...	...	59,102	76,626	...	...
Increase in certain Districts, 1902 ...	...	...	471	...	...	...	...	2,950	1,424
Decrease in certain Districts, 1902 ...	...	...	27,164	...	...	...	...	22,008	45,656
Net Increase in 1902 ... ...	...	...	...	...	...	...	...	...	...
Net Decrease in 1902 ... ...	...	...	26,693	...	...	...	...	19,058	44,232

In the area under cultivation for sugar the decrease is not so pronounced, and if allowance is made for the acreage used as fodder, to which reference has already been made, it would be still further reduced, the decline in acreage in the North being inconsiderable, but the Wide Bay group of districts showed only slightly more than half the area under crop in 1902 than was returned in the previous year—namely, 22,000 acres, compared with 42,000 acres.

On the area crushed the decrease was greater—namely, from 78,160 acres in 1901 to 59,102 acres in the following year. The effects of the bad season were severely felt in the Wide Bay districts, the falling off in area crushed being 17,635 acres, the next largest decreases being at Ingham-Mourilyan, 2,042 acres, and Mackay 1,400 acres.

In sugar manufactured the decrease already quoted of 44,232 tons—namely, from 120,858 tons in 1901 to 76,626 tons in 1902, was chiefly contributed by Wide Bay districts—29,558 tons; Mackay, 7,417 tons, and Ayr, 5,010; the only increases recorded being Ingham-Mourilyan 1,018 tons, and Bowen 406 tons.

A comparison of the average yield of the sugar crop in each of the great divisions of the State for the past two years is afforded in the following statement:—

Division.	TO EACH ACRE CRUSHED.				TON CANE TO EACH TON SUGAR.	
	Tons of Cane.		Tons of Sugar.		1901.	1902.
	1901.	1902.	1901.	1902.		
Southern ... ...	12.69	5.46	1.21	0.56	10.43	9.80
Central ... ...	11.78	...	1.25	...	9.44	...
Northern... ...	16.84	12.36	1.78	1.50	9.44	8.23
State ... ...	15.10	10.86	1.55	1.30	9.76	8.38

The tons of cane harvested to each acre crushed decreased by 28 per cent. for the whole State; 57 per cent. in the South and 27 per cent. in the North.

The quantity of sugar made to each acre crushed dropped by 5 cwt. per acre for the whole State, the decreases for the South and North being 13 cwt. and 5.6 cwt. per acre respectively.

It has been previously pointed out that in consequence of the dry weather a better return of sugar was obtained last year for each ton of cane harvested. This applied throughout the State. For whereas in 1901 it took for the whole of Queensland 9.76 tons of cane to make 1 ton of sugar—namely, 10.43 tons in the South, and 9.44 tons in the North, last year the proportions were, for the State 8.38 tons; for the South, 9.80 tons; and for the North, 8.23 tons only.

Fuller details with respect to the production in each district is afforded by the following table :—

L b.  
SUGAR AVERAGES, 1902.

District.			Tons of Cane per Acre Crushed.	Tons of Sugar per Acre Crushed.	Tons of Cane per Ton of Sugar.
<i>Southern.</i>					
Bundaberg and Gin Gin	...	...	5·23	0·54	9·72
Childers, Maryborough, and Tiaro	...	...	5·36	0·89	11·96
Logan	...	...	10·61	...	...
Marburg and Rosewood	...	...	...	...	10·36
Maroochy and Gympie	...	...	8·81	0·85	10·44
Nerang	...	...	15·73	1·67	9·80
Total Southern	...	...	5·46	0·56	9·80
<i>Central.</i>					
Rockhampton	...	...	...	...	...
<i>Northern.</i>					
Ayr	...	...	15·84	1·81	8·75
Bowen	...	...	13·58	1·53	8·85
Cairns and Douglas	...	...	14·63	1·75	8·34
Ingham and Mourilyan	...	...	13·61	1·78	7·63
Mackay	...	...	8·99	1·02	8·82
Total Northern	...	...	12·36	1·50	8·23
Total State	...	...	10·86	1·30	8·38

The best yield of cane per acre was obtained at Ayr, 15·84 tons, followed very closely by the most southerly district in the State—namely, Nerang, with 15·73 tons. The yields at Cairns-Douglas, Ingham-Mourilyan, and Bowen, fell a little below these figures—namely, to 14·63 tons, 13·61 tons, and 13·58 tons respectively. The poorest yield was obtained at Bundaberg-Gin Gin—namely, 5·23 tons.

The best average return of sugar to the acre was secured at Ayr—namely, 1·81 tons; the poorest result obtained in the Northern division, where the average for the whole was 1·50 tons, was at Mackay, with a fraction over 1 ton to the acre only (1·02). In the South, the small area at Nerang, 205 acres, gave the good average return of 1·67 tons, being double that obtained in the Logan and Maroochy-Gympie districts, and three times the yield of the Wide Bay groups.

At Ingham-Mourilyan the average required throughout the district to make 1 ton of sugar was only 7.63 tons of cane, and the greatest quantity needed in any district in the North was at Bowen, 88.5 tons, itself a low average. In the South, the least was at Nerang, 9.44, and the greatest at the Logan, 11.96.

The sugar industry, for manufacture alone, and in addition to the requirements for cane production, gave employment to 1,663 hands, and has invested in it £2,583,689 of capital for premises and machinery.

The following are the particulars :—

		Works.	Hands Employed.	VALUE.			
				Land* and Premises.	Machinery.		
				No.	No.		
Refineries				2	349	101,451	206,451
Juice Mills	In operation, 1902	{ ...		4	41	3,000	57,000
Sugar Mills		{ ...		41	1,273	175,439	1,795,131
Temporarily shut down		...		47	1,663	279,890	2,058,582
		...		14	...	59,117	186,100
				61	...	339,007	2,244,682

\* Including mill sites only.

The mills that were temporarily closed employed, in 1901, 392 hands, besides which the mills in work gave employment to 1,000 fewer men during 1902 than in the latter year, some of them running for a short period only.

There were 13 mills and 1 tramway working under "The Sugar Works Guarantee Act," &c. The total amount of advances made up to 31st December, 1901, being £497,952 11s. 2d., besides advances under other conditions of £46,000. The total indebtedness to 31st December, 1902, being £553,134 16s. 7d.

The throwing open of the Australian markets to the sugar of Queensland has removed for a brief time the question that was looming very closely a few years ago—namely, the position of Queensland when she had to meet the world's sugars in the world's markets. In view of the reduced crop for last year the matter may seem even less urgent, but it will at no distant date have to be faced, and it is to be hoped that the supply of Australia will soon be met by Australia's production, of which from her geographical position Queensland is likely to secure a large share.

	Tons.
The Commonwealth consumes annually	... ... ... ... ...
There was produced during 1902—	165,392

	Tons.
By Queensland	... ... ... ...
By New South Wales	76,626 21,544 98,170

	... 67,222
Leaving to be imported for 1902 from without the Commonwealth	
If the Queensland crop for 1901 be taken as being a more typical one rather than the poor crop of last year, a further amount has to be deducted of	... 44,232

	... 22,990
Leaving to be imported, or as a margin for further production	

The New South Wales production for 1901 was rather less than that for 1902, so that no allowance is required on that head.

As the Queensland crop for the 1898 season reached a tonnage of 163,734, it will be seen that the requirements of the Federal consumption were fully met on that occasion, so that after making every allowance for increased demand in response to a growing population, the question of export beyond the Commonwealth will speedily have to be dealt with.

The average consumption of sugar, both for the whole population and also *per capita* in each State of the Commonwealth and in New Zealand, based on the experience of the ten years ended 1901, was as follows:—

#### L c.

RETURN showing the AVERAGE ANNUAL CONSUMPTION of SUGAR, and also the AVERAGE ANNUAL CONSUMPTION per CAPITA of the MEAN POPULATION, for the DECAENNIAL PERIOD 1892-1901.

	Queensland.	New South Wales.	Victoria.	South Australia.	Western Australia.	Tasmania.	Total Federated States.	New Zealand.	Total Australasia
Average Annual Consumption—Tons	25,868	60,187	50,681	15,962	5,907	6,787	165,392	33,161	198,553
Average Annual Consumption per Capita—Lb.	123.91	104.86	96.48	101.00	103.48	91.85	103.56	104.16	103.66

Queensland is, for each individual, by far the heaviest consumer, and Tasmania the lightest. In New Zealand the ratio is nearly the same as that for the whole Commonwealth.

The net imports of sugar—*i.e.*, the excess of imports over exports, distinguishing between cane and beet sugar, into each of the other States for 1900 and 1901, were as follows:—

#### L d.

RETURN showing the NET IMPORTS of SUGAR for each of the other AUSTRALIAN STATES and NEW ZEALAND for the Years 1900 and 1901.

State.	1900.				1901.				
	Cane Sugar.	Beet Sugar.	Glucose.	Total.	Cane Sugar.	Beet Sugar.	Glucose.	Total.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
New South Wales	... ...	46,138	2,267	845	49,250	36,687	4,415	1,296	42,938
Victoria	... ...	49,533	38	787	50,358	59,622	...	1,105	60,727
South Australia	... ...	21,707	147	205	22,059	20,233	343	269	20,845
Western Australia	... ...	8,599	93	60	8,752	9,015	72	143	9,230
Tasmania	... ...	7,844	...	36	7,880	9,873	...	45	9,918
New Zealand	... ...	39,993	83	191	40,267	44,458	101	238	44,797
Total	... ...	173,814	2,628	2,124	178,566	179,888	4,931	3,096	187,915

The increase of total net imports in 1901 over those for 1900 only amounted to 9,349 tons, but no doubt the reduced crop for last year will be reflected in the imports for 1902-3. In 1900 the net imports of New South Wales and Victoria were about equal, but for 1901 Victoria was in excess of New South Wales by nearly 50 per cent., the former having considerably increased its importations, whilst the converse was the case with the latter.

There were exported between 1st June, 1902, and 31st March, 1903, 58,357 tons of sugar—namely, 11,643 tons of whites, 503 tons of yellow, and 46,211 tons of ration. Adding to this the requirements of the State, estimated at 25,868 tons, and this read in conjunction with the 1902 production of 76,626 tons, it is at once seen that the 14,398 tons remaining on hand in April, 1902 (as mentioned in my last Report), has been practically absorbed, and stock at the present time must be very low.

Though much has been done to build up the sugar industry to its present dimensions, and the progress made as to improved methods of production and manufacture seems very considerable to those who were conversant with sugar planting in the State in its infancy, this progress has had a much larger relation to the manufacture of the sugar than to the cultivation of the cane. Probably our best mills are equal to those of any country in respect to their appliances, but there is no doubt much has still to be accomplished in the field. Thorough cultivation, which embraces deep tillage, fertilisation, and irrigation, should be the planter's earnest aim, and something has been accomplished in this direction, more especially since the advent of Dr. Maxwell, the director of the Sugar Bureau, whilst much more remains to be done. Lime would appear to be a constituent much needed in the soil of many sugar districts, and in some instances is being procured and applied, nor have the benefits of green manuring

been lost sight of. Other elements are of course required, and with such a field for employment it seems a great pity that any manures should be exported from the State, and yet such is the case, as will be seen from the following table:—

## Le.

QUEENSLAND IMPORTS and EXPORTS of MANURE, 1902.  
IMPORTS.

Whence.	MANURE.		BONEDUST.	
	Quantity.	Value.	Quantity.	Value.
United Kingdom	88	£ 1,059	...	...
New South Wales	179	2,117	1	12
Victoria	10	160	...	...
South Australia	1	5	...	...
Germany	41	378	...	...
Japan	1	5	...	...
Hong Kong	2	18	...	...
Total Imports	322	3,742	1	12

## EXPORTS.

Whither.	MANURE.		BONEDUST.		SULPHATE OF AMMONIA.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
New South Wales	Tons. 357	£ 1,618	Tons. 80	£ 400	...	...
Victoria	652	2,876	1,685	8,826	...	...
Tasmania	400	1,750	...	...	...	...
Japan	13	169	...	...	10	123
Java	75	522	...	...	...	...
Philippines	2	15	...	...	...	...
Total Exports	1,499	6,950	1,765	9,226	10	123

Although the manure exported exceeds considerably both in quantity and value that imported, still nearly £4,000 worth was brought into the State, chiefly from New South Wales. That imported from England and Germany no doubt consisted of phosphates and chemical manures, and indeed the high values placed on all the imports lead to a similar conclusion with respect to the greater part of them.

There were 3,274 tons, valued at £16,299, of different kinds of manures exported, an amount exceeding the imports by 2,951 tons in weight, and £12,545 in value. The 1,499 tons returned as manure (unspecified) were chiefly by-products of the boiling-down establishments, being of a somewhat less value than the bonedust—namely, not quite £4 13s. per ton, whilst the latter was worth some 12s. per ton more; the whole of the imports were of a value exceeding £11 per ton. No doubt the cost for freight is the important factor in the matter, and perhaps in some instances better results may be obtained by sending bulky manures from the State and importing others that prove less costly in transit, nevertheless, when fertilisers are so much in demand any export would appear to be a matter to be regretted.

## ARROWROOT.

Last year the cultivation of arrowroot declined by 103 acres, and the production by 2,608 tons of root.

The following table gives details of the crop for the past two years:—

## M.

District.	1901.		1902.		Increase or Decrease—	
	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.
<i>Southern (East)</i> —						
Beaudesert	1	1	...	...	1	1
Brisbane	1	2	...	...	1	2
Caboolture	1	1	...	...	1	1
Gayndah	1	1	...	...	1	1
Logan	100	923	47	105	53	818
Maroochy	10	109	9	100	1	9
Nerang	255	2,771	185	632	70	2,139
Tiaro	1	3	...	...	1	3
Woodford	14	118	5	24	9	94
Total South	384	3,929	246	861	138	3,068
<i>Northern (East)</i> —						
Ayr	4	16	...	...	4	16
Mackay	1	4	...	...	1	4
Mourilyan	10	120	50	600	40	480
Total North	15	140	50	600	35	460
<b>TOTAL STATE</b>	<b>399</b>	<b>4,069</b>	<b>296</b>	<b>1,461</b>	<b>103</b>	<b>2,608</b>

There were 399 acres under arrowroot in 1901, yielding 4,069 tons of tuber, against 296 acres in 1902, returning 1,461 tons, averages of 10.20 tons and 4.94 tons respectively.

The cultivation is chiefly confined to the districts of Logan, Mourilyan, and Nerang, as last year they comprised together 96 per cent. of the total area. The greater proportion of the crop is devoted to the feeding of pigs, as the demand for arrowroot as a food product is a limited one. The Agricultural Department have been making inquiries as to the prospect of obtaining a market in South Africa, but the reports received are not very encouraging, as the demand is small, cornflour and other farinaceous articles being more in use, whilst the West Indian arrowroot would appear at present to hold the limited market offering. The retail price, however, is about 8d. per lb., and whether there is not in this fact room for the disposal of some of the Queensland product is deserving of consideration.

Of the total production of 1,461 tons of tubers, only 975 tons were devoted to the manufacture of commercial arrowroot, the results being as follow:—

	District.	Hands Employed.	Tuber.	Arrowroot.
			Tons.	lb.
Mourilyan	...	12	600	120,960
Logan	...	5	60	14,440
Nerang	...	4	285	48,880
Others	...	...	30	8,422
		21	975	192,702

Thus it will be seen that each ton of tuber yielded 198 lb. of the commercial article.

The imports of arrowroot are nominal only, but substantial quantities of maizena and cornflour are still introduced. Particulars for the last five years are as follow:—

#### M a.

Year.	ARROWROOT.		MAIZENA AND CORNFLOUR.	
	Quantity.	Value.	Quantity.	Value.
	Lb.	£	Lb.	£
1898 ...	12,952	163	300,742	3,260
1899 ...	13,262	171	437,946	4,306
1900 ...	13,785	200	327,318	3,331
1901 ...	2,830	26	289,026	3,220
1902 ...	5,648	59	383,113	4,139

The small quantity of arrowroot imported is probably due to a sentimental idea on the part of a few consumers that the West India article is preferable to the home product.

The exports of arrowroot and maizena and cornflour are about equal in value to the imports of these articles. For the last five years they were as follow:—

#### M b.

Year.	ARROWROOT.		MAIZENA AND CORNFLOUR.	
	Quantity.	Value.	Quantity.	Value.
	Lb.	£	Lb.	£
1898 ...	505,512	5,689	4,776	47
1899 ...	497,115	4,228	1,676	24
1900 ...	463,617	3,534	18,566	189
1901 ...	582,069	4,278	7,340	139
1902 ...	360,719	3,872	13,236	210

The export of arrowroot during 1902 exceeded—indeed, nearly doubled—the production, so that stocks from the previous year must have been reduced to supply the demand, and yet fell considerably short of the export for 1901. The bulk of the export is to the other States of Australasia; what quantity is shipped thence to places abroad it is impossible to say, but the only direct shipment further afield was one of 1,680 lb. to Natal.

## TOBACCO.

Although there was only a small decline in the area planted, the crop was a most unsatisfactory one, the return obtained last year being less than one-third of that for 1901. The following table furnishes particulars of the crop for the last two years:—

N.

District.	1901.		1902.		Increase or Decrease.—	
	Area.	Produce Dried Leaf.	Area.	Produce Dried Leaf.		
					Acres.	Cwt.
Southern (West)—						
Inglewood ...	... ... ... ...	72 5,017	7 1,812	6 23	— 65	— 757
Texas ...	... ... ... ...	692	715	1,812	— 23	— 3,205
Total South ...	... ... ...	764	5,780	722	— 42	— 3,962
Northern (East)—						
Douglas ...	... ... ... ...	4	68	...	— 4	— 68
Total North ...	... ... ...	4	68	...	— 4	— 68
Total State ...	... ... ...	768	5,848	722	— 46	— 4,030

The cultivation for 1902 was confined to the two districts of Inglewood and Texas, and practically to the lastnamed, in which there was an increased area planted of 23 acres.

The acreage and produce for the last two years were—1901, 768 acres, 5,848 cwt.; 1902, 722 acres, 1,818 cwt.

As there is a large market within the State itself for tobacco in its various forms, and experts are of opinion that there are large areas of the State eminently adapted to its production, it is a matter for surprise that the cultivation of tobacco does not progress. Some idea as to the demand for tobacco may be gathered from the following table, showing the imports for the last two years:—

N a.

Year.	Tobacco, &c.	Imported.		Entered for Home Consumption.
		Lb.	Lb.	
1901 ... ...	Manufactured ... ... ... ...	704,494	695,885	
	Unmanufactured ... ... ... ...	88,988	116,540	
	Cigars ... ... ... ...	67,741	71,990	
	Cigarettes ... ... ... ...	74,455	77,510	
	Snuff ... ... ... ...	320	387	
	Total ... ... ... ...	935,998	962,312	
1902 ... ...	Manufactured ... ... ... ...	947,051	*871,622	
	Unmanufactured ... ... ... ...	84,432	*89,781	
	Cigars ... ... ... ...	50,532	*48,584	
	Cigarettes ... ... ... ...	113,808	*113,362	
	Snuff ... ... ... ...	716	516	
	Total ... ... ... ...	1,196,539	1,123,865	

\* Including imports, produce of other States, duty free.

As the imports for 1902 amounted to 1,196,539 lb., exports 488,983 lb., and 203,616 lb. were produced, the consumption, based upon the transaction of one year, was 911,172 lb., of which the home produce contributed nearly 22 per cent.

The quantity and value of tobacco, &c., manufactured for the last three years is shown in the following table:—

N b.

		1900.		1901.		1902.	
		Lb.	Value. £	Lb.	Value. £	Lb.	Value. £
Tobacco ... ... ... ...	... ... ... ...	612,350	58,325	669,247	75,960	341,649	29,077
Cigars ... ... ... ...	... ... ... ...	1,463	669	1,151	547	1,300	510
Cigarettes ... ... ... ...	... ... ... ...	28,857	8,624	30,450	9,135	...	...
Snuff ... ... ... ...	... ... ... ...	176	23	245	39	10	1
		642,846	67,641	701,093	85,681	342,959	29,588

The output of the tobacco factories for 1902 thus fell from 701,093 lb., of a value of £85,681, to 342,959 lb., worth £29,588. There would also appear to be a considerable difference in the value per lb. of the two years' output; that for 1901 being equal to 2s. 5½d. per lb., for 1902, 1s. 8¾d. per lb.

The following table shows the amount of excise paid on tobacco manufactured within the State for the last two years :—

	N c.								1901. £	1902. £
Tobacco	...	...	...	...	...	...	...	...	29,565	...
Cigars	...	...	...	...	...	...	...	...	81	...
Cigarettes	...	...	...	...	...	...	...	...	2,814	...
Snuff	...	...	...	...	...	...	...	...	20	...
									32,480	28,152

### COFFEE.

There was a decline in both area and production in 1902, as compared with the previous year, although the average yield per acre was slightly better. Information as to the crop for the two years is contained in the following table :—

### O.

DISTRICT.	Not yet Bearing.		Bearing.				Average Yield per acre (Bearing).		1902. Increase or Decrease —	1902. Increase or Decrease —	
			1901.		1902.		1901.	1902.			
	Acres.	Acres.	Acres.	Lb.	Acres.	Lb.	Lb.	Lb.			
<i>Southern (East)</i> —											
Beaudesert	...	...	...	...	1	4	...	...	4	...	— 1
Brisbane	...	...	1	...	...	...	...	...	...	...	...
Gympie	...	...	...	...	1	380	...	...	380	...	— 1
Ipswich	...	...	...	...	1	...	...	...	...	...	...
Maroochy	...	...	23	8	23	10,980	44	14,873	477	338	21
Maryborough	...	...	...	...	5	2,000	10	514	400	51	5
Total Southern	...	...	24	9	30	13,364	54	15,387	445	285	24
<i>Central (East)</i> —											
Rockhampton	...	...	17	16	3	1,500	3	1,200	500	400	...
St. Lawrence	...	...	...	...	1	425	...	...	425	...	— 1
Total Central	...	...	17	16	4	1,925	3	1,200	481	400	— 1
<i>Northern (East)</i> —											
Cairns	...	...	46	39	187	58,401	123	62,027	312	504	— 64
Cook	...	...	4	3	19	3,670	20	2,140	193	107	1
Douglas	...	...	5	3	23	8,000	15	6,520	348	435	— 8
Herberton (part of)	...	...	6	4	1	2,200	2	2,707	2,200	1,354	1
Mackay	...	...	29	6	31	3,210	35	5,200	104	149	4
Mareeba	...	...	12	2	43	25,738	22	200	599	9	— 21
Mourilyan	...	...	34	...	32	13,785	40	17,920	431	448	8
Total Northern	...	...	136	57	336	115,004	257	96,714	342	376	— 79
<b>TOTAL STATE</b>	...	...	<b>177</b>	<b>82</b>	<b>370</b>	<b>130,293</b>	<b>314</b>	<b>113,301</b>	<b>352</b>	<b>361</b>	<b>— 56</b>
											<b>— 16,992</b>

Very little new planting took place during 1902, consequently the area under coffee-trees which were not yet bearing was much reduced, comprising 82 acres, a considerable proportion of the 177 acres so returned in 1901 having become effective.

In a number of instances the trees have been killed either by frost or drought, and in some cases the plantations have been entirely abandoned. The total reduction in area last year from that of the year before, both productive and newly planted, was 151 acres.

The productive area in 1901 was 370 acres, returning 130,293 lb. of coffee, or an average yield of 352 lb. per acre; and in 1902, 314 acres—113,301 lb. and 361 lb. respectively. The production for 1900, however—102,134 lb.—was below that for 1902.

The Northern Division contributes the larger portion of coffee plantations of the State; 257 productive acres and 57 acres which are not yet bearing being returned there. These constituted 79 per cent. of the total area. From a small area in Herberton—namely, 1 acre in 1901, and 2 acres in 1902—very fine yields of 2,200 lb. and 2,707 lb. were obtained.

The yield was so good that special inquiries were instituted and these satisfactory results confirmed. The next best yield was at Cairns, where from 123 acres a return of 62,027 lb. of parchment was obtained, equal to 504 lb. per acre.

The demand for coffee does not appear to increase materially, and unless it should be more generally adopted as a beverage, thus to some extent supplanting tea, any addition to present requirements can be fractional only.

The question of finding a market has caused much disquietude to those interested in other coffee producing countries, and the question has become so acute in Brazil that various methods for limiting the production have been propounded, and are still being seriously considered.

The consumption per capita in Queensland, the mean of six years, and for 1902, was—

	6 years—Mean.				1902.
Tea...	...	...	...	...	6.69
Coffee	...	...	...	...	0.49

The net imports of coffee last year exceeded the production, so that home-grown coffee for 1902 represented only 45 per cent. of the State's consumption.

The imports, exports, and net imports for five years are shown in the following table:—

## O a.

	Coffee.	IMPORTS.		EXPORTS.		NET IMPORTS.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
						Lb.	£
1898	Raw ...	84,543	3,076	7,692	221	76,851	2,855
	Roasted	95,138	4,226	1,103	61	94,035	4,165
	Total	179,681	7,302	8,795	282	170,886	7,020
1899	Raw ...	128,480	4,055	7,921	252	120,559	3,803
	Roasted	89,122	4,204	804	38	88,318	4,166
	Total	217,602	8,259	8,725	290	208,877	7,969
1900	Raw ...	56,766	1,804	5,231	160	51,535	1,644
	Roasted	96,881	4,519	1,907	100	94,974	4,419
	Total	153,647	6,323	7,138	260	146,509	6,063
1901	Raw ...	93,221	2,589	4,721	140	88,500	2,449
	Roasted	74,687	3,564	1,147	75	73,540	3,489
	Total	167,908	6,153	5,868	215	162,040	5,938
1902	Raw ...	97,857	2,791	23,818	664	74,039	2,127
	Roasted	66,187	3,093	2,070	140	64,117	2,953
	Total	164,044	5,884	25,888	804	138,156	5,080

With respect to the imports, it has to be borne in mind that the roasted coffee, which in 1902 comprised 40 per cent. of the total, and in some years even a larger proportion, frequently contains a large admixture of chicory, whilst the production as recorded is of pure coffee, and, if adulterated, carries greater than its actual weight into consumption. There was, relatively, a large export of raw coffee in 1902—namely, 23,818 lb., of which 10,910 lb. were the produce of the State.

## PUMPKINS AND MELONS.

There were 2,573 acres planted in 1902, from which 6,087 tons of pumpkins and melons were obtained, an average of 2.37 tons per acre; in the previous year the average was 3.90 tons, 56,297 tons being returned from 14,448 acres. In 1902 there were also 827 acres planted which failed to germinate in consequence of the drought. The greater portion of these crops are grown in the Southern Division, the districts of principal production being Gatton, Nerang, Brisbane, and Esk.

## VINES, GRAPES, AND WINE.

The vine suffered from the dry weather in common with all other crops, and the plant over a very considerable area died entirely, for whilst 1,990 acres were recorded as under vines in 1901, there were only 1,559 acres so returned in 1902, a decrease of 431 acres. Of these, 42 acres were on the area that had not come into bearing. Of the area from which a crop was taken, there were 1,691 acres in 1901, and 1,302 acres last year.

The following table further compares the crop for the two past seasons:—

## Q.

Year.	VINEYARD.			Grapes Gathered.	Average Yield.
	Acres Bearing.	Acres not Bearing.	Total.		
1901	1,691	299	1,990	4,063,109	2,403
1902	1,302	257	1,559	2,284,404	1,755

In 1902, 2,284,404 lb. of grapes were obtained, or an average yield of 1,755 lb. to each acre, the poorest production since 1893, and the poorest average yield for upwards of 10 years. In 1901, the output was 4,063,109 lb., and the average yield 2,403 lb. per acre.

The acreage and yield for the past two years in some of the principal vine districts of the State are shown in the following table:—

## Q.a.

Petty Sessions District.	AREA UNDER VINES.								
	1901.			1902.			Increase or Decrease in Latter Year.	1901.	1902.
	Bearing.	Not yet Bearing.	Total Area.	Bearing.	Not yet Bearing.	Total Area.		Grapes Gathered.	Grapes Gathered.
Roma ...	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Lb.	Lb.
... ... ... ...	450	100	550	137	51	188	— 362	871,114	186,044
Brisbane ...	139	23	162	137	43	180	— 18	417,335	347,365
Toowoomba ...	122	13	135	116	7	123	— 12	513,982	301,719
South Brisbane ...	108	16	124	102	16	118	— 6	291,451	186,307
Gatton ...	87	5	92	85	11	96	— 4	67,668	182,012
Rockhampton ...	62	20	82	76	5	81	— 1	198,770	14,790
Maryborough ...	62	7	69	63	7	70	— 1	100,898	37,602
Warwick ...	52	1	53	55	4	59	— 6	128,222	188,726
Logan ...	51	8	59	45	9	54	— 5	274,102	64,100
Gympie ...	31	16	47	30	13	43	— 4	129,640	25,310
Marburg ...	41	1	42	9	26	35	— 7	27,680	18,300
Rosewood ...	36	3	39	35	...	35	— 4	73,952	150,610
Highfields ...	30	3	33	30	1	31	— 2	18,924	46,610
Laidley ...	22	2	24	18	7	25	— 1	189,390	51,470
Allora ...	18	2	20	23	...	23	— 3	100,831	44,492
All other Districts ...	380	79	459	341	57	398	— 61	659,150	438,947
	1,691	299	1,990	1,302	257	1,559	— 431	4,063,109	2,284,404

Of the 431 acres by which the area for 1902 decreased, 362 acres were in Roma. The leading district with respect to the cultivation of the grape, the soil and climate of Roma are in many respects well adapted to the needs of the vigneron, but it is unfortunately placed geographically, being well within the western dry belt; and whilst the vine can suffice with less moisture than many crops, yet during a heavy drought the climate of Roma is somewhat dry for its needs. Irrigation would appear to be a solution of the difficulty, and one vigneron at least in that district is giving attention to the matter. It is stated however, that a supply of moisture greater than is necessary to maintain life and vigour, is undesirable for vines intended for wine-making, and that grapes are in the best condition for this purpose when the vine has been short of moisture, during the period of ripening. In 1901 there were 550 acres under vines in Roma, from 450 acres of which 871,114 lb. of grapes were obtained, the corresponding figures for last year were 188 acres, from 137 of which 186,044 lb. of grapes were returned. Brisbane, Toowoomba, and South Brisbane were the only districts in which the area under vines exceeded 100 acres, Gatton coming very close with 96 acres; the productive area and yield last year in these districts were:—Brisbane, 137 acres and 347,365 lb.; Toowoomba, 116 acres and 301,719 lb.; South Brisbane, 102 acres and 186,307 lb.; and Gatton, 85 acres and 182,012 lb. There was an increase of 18 acres under vines in Brisbane, out of a total increase of 33 acres in all districts which showed an increase. Rosewood, from an area of 35 acres, returned 150,610 lb. of grapes, or—considering the season and averages obtained elsewhere—the fine average return of 4,303 lb. per acre; mainly contributed by one large producer, who obtained the fine average yield of 4,928 lb. per acre from a considerable area.

The average yields obtained in five of the principal vine districts for each of the last five years were as follow:—

## Q.b.

		1898. Average per Acre.	1899. Average per Acre.	1900. Average per Acre.	1901. Average per Acre.	1902. Average per Acre.
		Lb.	Lb.	Lb.	Lb.	Lb.
Roma ...	... ... ... ...	2,353	327	535	1,936	1,358
Brisbane ...	... ... ... ...	2,122	2,249	2,976	3,002	2,536
Toowoomba ...	... ... ... ...	3,829	3,378	3,807	4,213	2,601
South Brisbane ...	... ... ... ...	2,511	2,814	2,917	2,699	1,827
Warwick ...	... ... ... ...	2,611	2,980	1,799	3,821	3,431
Total State	... ...	2,383	1,850	2,096	2,403	1,755

The first four of these districts, in point of area, rank as placed. Although Warwick was surpassed last year in this respect by three other districts, it is accorded a place as consistently returning a high average yield, if the season for 1900 be excepted, when a spell of dry and hot weather was experienced in that locality at a critical period for the vine crops. Last year Warwick gave the best average of any of the five districts, with 3,431 lb. per acre, followed in order by Toowoomba, 2,601 lb.; Brisbane, 2,536 lb.; South Brisbane, 1,827 lb.; and Roma, 1,358 lb., the last-named being the only district with an average below that for the whole State—namely: 1,755 lb.

## WINE-MAKING.

Although the table grape as a fruit is largely used, and the vine has importance in this respect in its commercial aspect, the production of wine is, of course, the chief aim of the vigneron. The quantity of wine made and brandy distilled during each of the past five years were as follow:—

## Q c.

Years.							Number of Makers.	Quantity of Wine Made.	Quantity of Brandy Distilled.
								Gallons.	Gallons.
1898	...	...	...	...	...	...	613	134,334	1,115
1899	...	...	...	...	...	...	512	131,045	615
1900	...	...	...	...	...	...	556	132,489	1,055
1901	...	...	...	...	...	...	538	148,835	1,112
1902	...	...	...	...	...	...	391	100,852	2,199

Queensland can hardly yet claim to rank as a wine-producing country, seeing that the total output of the State is much below the return of several of the individual vineyards of the southern States. There were 391 persons who made wine in 1902, producing between them 100,852 gallons, or an average of 258 gallons each, showing that a large proportion of the makers produce very small quantities probably for their own household consumption only.

Makers whose output was 1,000 gallons and over numbered 16, producing between them 54,800 gallons, or more than half the entire output of the State, included in which are 31,200 gallons that were made by three vignerons, the number whose output exceeded 5,000 gallons.

The following table shows the chief districts of production, with their output for 1902:—

## Q d.

Petty Sessions District.								Number of Makers.	Quantity of Wine Made.	Quantity of Brandy Distilled.
									Gallons.	Gallons.
Toowoomba	...	...	...	...	...	...	...	103	19,200	...
Roma	...	...	...	...	...	...	...	5	16,130	500
Rosewood	...	...	...	...	...	...	...	6	10,335	800
Brisbane	...	...	...	...	...	...	...	10	8,576	719
Warwick	...	...	...	...	...	...	...	5	7,770	180
South Brisbane	...	...	...	...	...	...	...	24	7,658	...
Highfields	...	...	...	...	...	...	...	46	7,631	...
Logan	...	...	...	...	...	...	...	36	3,127	...
Woodford	...	...	...	...	...	...	...	1	3,000	...
Laidley	...	...	...	...	...	...	...	11	2,230	...
Allora	...	...	...	...	...	...	...	5	1,900	...
All other Districts	...	...	...	...	...	...	...	139	13,295	...
TOTAL	...	...	...	...	...	...	...	391	100,852	2,199

Toowoomba, Roma, and Rosewood were the only districts in which the output exceeded 10,000 gallons, nearly half the wine in the State being produced in these three districts. As is the case with milk and butter, there is no relation between the grape grown in a district and the wine made therein, as grapes are frequently transported long distances for conversion into wine.

The removal of the tariff against the wine from the other States of the Commonwealth as a consequence of federation has brought the more matured wines of South Australia and Victoria into closer competition with the Queensland article, and it behoves our vignerons to maintain and improve the qualities of their wines if they would hold the markets of this State.

Stocks of wine have been very heavy in the southern market, sales in London not having realised expectation, and last season prices for grapes ruled low, as most cellars were full, resulting in the manufacture of wines for distillation into brandy, and an increased output of the latter. No doubt the reduced price obtainable here has led to the same results; in any case, nearly twice as much brandy was distilled last year as in 1901—namely: 2,199 gallons, against 1,112 gallons.

As no brandy is made in Queensland, except by license under 1 Edwd. VII., No. 8, Comm. Act, the quantities in stock available for fortification must have increased, or larger quantities of fortified wines must be going into consumption. Brandy was made in the four districts of Roma, Rosewood, Brisbane, and Warwick.

The following statement shows the quantity and value of wine imported from New South Wales, Victoria, and South Australia, for each of the last two years:—

	Q. e.			
	Gallons.	£	Gallons.	£
New South Wales...	7,006	2,989	16,715	5,384
Victoria ...	5,320	2,248	21,936	9,860
South Australia ...	13,102	5,277	19,994	6,671
	25,428	10,514	58,645	21,915

Thus the imports from the three States for 1902 were more than double those for 1901, both in quantity and value; but those for individual States advanced by greatly varying ratios. Imports from Victoria multiplied by four, New South Wales by two, and South Australia by one-half.

#### BANANAS.

Although the area under this fruit did not suffer great diminution—about 10 per cent.—the output declined by about one-half. A comparison of the crops for 1901 and 1902 is afforded by the following table:—

#### R.

District.	Area.		Production.		Increase, or Decrease —	
	1901.	1902.	1901.	1902.	Area.	Quantity.
Brisbane ...	172	214	47,730	22,922	42	24,808
Cairns ...	1,480	1,071	575,760	248,663	— 409	327,097
Cleveland ...	50	25	10,431	2,653	— 25	7,778
Cook ...	37	32	15,050	7,936	— 5	7,114
Logan ...	393	240	126,829	37,640	— 153	89,189
Maroochy ...	593	628	143,397	77,407	— 35	65,990
Maryborough ...	150	147	58,765	25,930	— 3	32,835
Mourilyan ...	2,484	2,478	1,246,695	694,405	— 6	552,290
Redcliffe ...	138	175	39,650	18,790	— 37	20,860
Somerset ...	126	126	8,764	8,390	— ...	374
All other Districts ...	149	130	40,648	15,279	— 19	25,369
	5,772	5,266	2,313,719	1,160,015	— 506	— 1,153,704

The decreases in area in Cairns, Cleveland, and Logan aggregated 587 acres, and with small reductions in area in other districts exceeded the decrease for the whole State. Substantial increases, in Brisbane of 42 acres, Maroochy of 35 acres, and Redcliffe of 37 acres, together contributing the counterbalancing area of 114 acres.

The production in 1901 was 2,313,719 bunches, and last year 1,160,015 bunches, a decrease of 1,153,704 bunches. Cairns and Mourilyan returned 943,068 bunches, or 81 per cent. of the total output, giving an average yield per acre of 266 bunches, whilst the average for the whole State was 220 bunches. The average yield for Cairns and Mourilyan were 232 bunches and 280 bunches respectively.

#### PINEAPPLES.

There was an increased area under this fruit in 1902, compared with 1901—namely: 81 acres; but the produce decreased by about two-sevenths. Particulars respecting the last two seasons' crops are furnished in the following table:—

#### S.

District.	1901.		1902.		Increase or Decrease—	
	Acres.	Dozen.	Acres.	Dozen.	Acres.	Dozen.
Brisbane ...	446	169,320	478	132,465	32	— 36,855
Caboolture ...	13	2,370	19	2,480	6	110
Cairns ...	91	22,631	100	18,620	9	— 4,011
Cleveland ...	70	33,741	78	16,313	8	— 17,428
Cook ...	11	1,850	10	2,930	— 1	1,080
Logan ...	130	42,174	151	31,179	21	— 10,995
Maroochy ...	61	20,654	81	30,408	20	9,754
Maryborough ...	49	22,148	59	7,685	10	— 14,463
Mourilyan ...	11	1,545	10	2,000	— 1	455
Redcliffe ...	16	10,715	14	6,320	— 2	— 4,395
Rockhampton ...	34	5,422	27	1,985	— 7	— 3,437
South Brisbane ...	15	6,624	8	1,457	— 7	— 5,167
All other Districts ...	73	20,523	66	6,602	— 7	— 13,921
	1,020	359,717	1,101	260,444	81	— 99,273

There were 1,020 acres under pines in 1901 and 1,101 acres last year, whilst the production was 359,717 dozen and 260,444 dozen in each year respectively.

The following districts added to the area under pines:—Brisbane, 32 acres; Logan, 21 acres; Maroochy, 20 acres; and Maryborough, 10 acres. One-half the production was contributed in 1902 by Brisbane—namely: 132,465 dozen; a decrease, however, of 36,555 dozen on the crop for 1901. The average yield per acre for Queensland was 237 dozen.

### ORANGES.

As with pineapples, a larger area was returned as under oranges last year, although the production considerably decreased. Full information as to the experience of the past two seasons is given in the following table:—

### T.

Petty Sessions District.	Area.		Bearing. 1902.	Not yet bearing 1902.	Production.		Increase, or Decrease —	
	1901.	1902.	Area.		1901.	1902.	Area.	Production.
	Acres.	Acres.	Acres.	Acres.	Dozen.	Dozen.	Acres.	Dozen.
Bowen ... ...	162	171	135	36	107,684	83,926	9	- 23,758
Brisbane ... ...	51	48	45	3	35,106	19,070	- 3	- 16,036
Bundaberg ... ...	24	26	24	2	3,383	4,060	2	677
Caboolture... ...	50	42	33	9	9,120	8,660	- 8	- 460
Cairns ... ...	61	86	79	7	92,000	38,000	25	- 54,000
Cardwell ... ...	131	137	103	34	61,912	83,110	6	21,198
Charters Towers ...	28	25	23	2	32,300	27,800	- 3	- 4,500
Childers ... ...	17	17	17	...	7,025	1,620	...	- 5,405
Cleveland ... ...	55	47	33	14	32,346	10,000	- 8	- 22,346
Cook ... ...	50	58	57	1	26,155	21,664	8	- 4,491
Douglas ... ...	96	109	96	13	58,903	55,154	13	- 3,749
Gatton ... ...	186	189	162	27	125,267	50,340	3	- 74,927
Gladstone ... ...	18	18	14	4	15,700	2,780	...	- 12,920
Gympie ... ...	87	92	50	42	40,416	39,886	5	- 530
Herberton ... ...	39	31	30	1	71,526	22,239	- 8	- 49,287
Hughenden ... ...	14	15	13	2	7,600	3,040	1	- 4,560
Logan ... ...	137	123	89	34	101,592	36,826	- 14	- 64,766
Maroochy ... ...	674	758	290	468	229,053	335,813	84	106,760
Maryborough ... ...	364	383	229	154	224,706	118,414	19	- 106,292
Nerang ... ...	143	158	108	50	161,358	100,212	15	- 61,146
Redcliffe ... ...	70	70	43	27	33,590	8,220	...	- 25,370
Rockhampton ... ...	120	122	97	25	80,295	19,636	2	- 60,659
South Brisbane ...	36	49	14	35	38,450	12,940	13	- 25,510
Tiaro ... ...	52	51	42	9	33,143	8,700	- 1	- 24,443
Toowoomba ... ...	37	38	34	4	40,328	760	1	- 39,568
All other Districts... ...	381	278	225	53	211,306	78,372	- 103	- 132,934
<b>TOTAL ... ...</b>	<b>3,083</b>	<b>3,141</b>	<b>2,085</b>	<b>1,056</b>	<b>1,880,264</b>	<b>1,191,242</b>	<b>58</b>	<b>- 689,022</b>

The area of the orangeries of the State was 3,083 acres in 1901, and 3,141 acres last year an increase with the latter year of 58 acres. Of the 1902 area, 2,085 acres were productive, and 1,056 acres were not yet bearing; in 1901, 1,941 acres were returned as bearing, and 1,142 as not yet bearing. The largest increases in area were:—84 at Maroochy, 25 acres at Cairns, 19 acres at Maryborough, 15 acres at Nerang, and 13 acres each at Douglas and South Brisbane. The largest decrease consisted of 14 acres in the Logan district.

There were 1,880,264 dozen oranges produced in 1901, and 1,191,242 dozen in the following year, a decrease of 689,022 dozen, or 37 per cent. on the output for 1901.

Maroochy is far and away the most important district with respect to the cultivation of oranges; 758 acres were returned as under this fruit in 1902, almost double the area of the next district, Maryborough, where 383 acres were returned. Districts having at least 100 acres were:—Gatton, 189; Bowen, 171; Nerang, 158; Cardwell, 137; Logan, 123; Rockhampton, 122; and Douglas, 109. Of the districts with yields in 1902 exceeding 100,000 dozen, the following were outputs:—Maroochy, 335,813 dozen; Maryborough, 118,414 dozen; Nerang, 100,212 dozen.

These three districts, which aggregated 1,299 acres, and 554,439 dozen, or centesimal ratios to the total area and production of Queensland, of 41 and 47 respectively, are all situated in the eastern portion of the Southern Division of the State. The average yield for Queensland on the area in bearing for 1901 was 969 dozen, and for 1902, 571 dozen per acre. The averages last year for the three principal districts were:—Maroochy, 1,158 dozen, Maryborough, 517 dozen; and Nerang, 928 dozen. Some of the districts with smaller areas returned much better averages. The best average yield was at Charters Towers, where from 23 acres bearing, an average of 1,209 dozen per acre was obtained. Thirty acres at Herberton gave 741 dozen each acre. Cardwell and Douglas, from acreages of 103 and 96, returned average crops of 807 and 575 dozen per acre.

## MANGOES.

This fruit, with an increase of 37 acres in area, returned 79,787 dozen less fruit. The crops for the last two seasons are compared in the following table :—

## U.

District.	Area.		Bearing. 1902.	Not yet bearing. 1902.	Production.		Increase, or Decrease — 1902.	
	1901.	1902.			1901.	1902.	Acres.	Dozen.
Bowen ... ... ...	38	37	37	...	54,703	18,126	— 1	— 36,577
Brisbane ... ... ...	10	6	6	...	8,640	530	— 4	— 8,110
Bundaberg ... ... ...	12	20	18	2	5,138	2,420	— 8	— 2,718
Cairns ... ... ...	9	8	8	...	10,320	7,200	— 1	— 3,120
Cleveland ... ... ...	11	13	9	4	4,497	1,268	2	— 3,229
Cook ... ... ...	24	27	26	1	33,900	49,100	3	15,200
Ingham ... ... ...	16	10	10	...	14,000	26,000	— 6	12,000
Logan ... ... ...	20	29	27	2	27,120	7,317	9	— 19,803
Mackay ... ... ...	21	24	24	...	16,282	33,104	3	16,822
Maryborough ... ... ...	36	42	37	5	23,132	6,243	6	— 16,889
Mourilyan ... ... ...	12	12	12	...	4,600	8,600	...	4,000
Palmer ... ... ...	4	4	4	...	4,350	5,482	...	1,132
Rockhampton ... ... ...	61	48	37	11	8,510	3,960	— 13	— 4,550
Townsville ... ... ...	34	33	33	...	43,130	19,491	— 1	— 23,639
All other Districts ... ... ...	75	107	96	11	78,603	68,297	32	— 10,306
Total ... ... ...	383	420	384	36	336,925	257,138	37	— 79,787

The area of 383 acres returned in 1901 was increased to 420 acres in the following year. The production for the two years being 336,925 dozen and 257,138 dozen respectively. Rockhampton, Maryborough, and Bowen returned the largest area under mangoes—namely: 48, 42, and 37 acres respectively, or between them 30 per cent. of the total area, but yielded only 11 per cent. of the total production. Other districts with smaller areas gave much better—both actual and relative—results. At Ingham, 10 acres yielded 26,000 dozen, or an average of 2,600 dozen per acre; at Cook, 26 acres returned 49,100 dozen, or an average of 1,888 dozen; and Mackay, 24 acres gave 33,104 dozen, or an average of 1,379 dozen per acre.

## STRAWBERRIES.

The drought brought the cultivation of this crop practically to a standstill. The plant of this fruit does not, of course, partake of the permanent character common to most fruits. The following table contains full information as to the cultivation of the strawberry during 1901 and 1902:—

## V.

Petty Sessions District.	Area.		Production.		Increase or Decrease —	
	1901.	1902.	1901.	1902.	1902.	1902.
Bundaberg ... ... ...	6	3	5,650	100	— 3	— 5,550
Cleveland ... ... ...	25	26	71,656	6,180	1	— 65,476
Gympie ... ... ...	4	2	140	260	— 2	120
Maroochy ... ... ...	84	34	194,450	6,174	— 50	— 188,276
All other Districts ... ... ...	20	...	16,229	...	— 20	— 16,229
Total ... ... ...	139	65	288,125	12,714	— 74	— 275,411

The 139 acres returned in 1901 were reduced to 65 acres last year, four districts only returning the crop:—Maroochy, 34 acres, 6,174 quarts; Cleveland, 26 acres, 6,180 quarts; Bundaberg, 3 acres, 100 quarts; Gympie, 2 acres, 260 quarts. The production for the State being:—1901, 288,125 quarts; and 1902, 12,714 quarts.

## APPLES.

There was an addition of 75 acres made to the area of apple orchards last year, besides the replacing of 10 acres of old orchards killed by the drought. The crops for the last two years are compared in the following table:—

## W.

	1901.	1902.	Increase, or Decrease — 1902.	Bearing. 1902.	Not yet bearing. 1902.	1901.	1902.	Increase, or Decrease — 1902.
Herberton ... ... ...	5	6	1	4	2	196	220	24
Highfields ... ... ...	13	3	— 10	3	...	130	105	— 25
Killarney ... ... ...	2	2	...	...	2	20	...	— 20
Stanthorpe ... ... ...	221	294	73	142	152	5,964	7,697	1,733
Toowoomba ... ... ...	14	14	...	12	2	400	691	291
Warwick ... ... ...	6	11	5	11	...	192	122	— 70
All other Districts ... ... ...	17	23	6	17	6	593	330	— 263
	278	353	75	189	164	7,495	9,165	1,670

As the natural habitat of the apple is in the middle of the temperate zone, it stands to reason that it thrives best in the colder areas of countries situated near the tropics; it is not, therefore, surprising to find its cultivation confined almost entirely to the elevated plateau of the Downs and Stanthorpe district, 6 acres at Herberton comprising the whole area planted elsewhere. There were 278 acres under this fruit in 1901, and 353 acres in 1902; of the last-named, 294 acres were in Stanthorpe, or 83 per cent. of the whole. There was an addition of 73 acres made to the area of this district during 1902.

There was also an increase in the production, 7,495 bushels being obtained in 1901, or an average of 44 bushels per acre; and 9,165 in 1902, or an average of 4 bushels more than in the previous year. The yield for Stanthorpe was 5,964 bushels in 1901, and 7,697 bushels in the following year, averages of 48 and 54 bushels respectively. From the 4 acres bearing in the Herberton district, 220 bushels were obtained, an average of 55 bushels to each acre.

#### OTHER FRUITS.

A special table, No. XV., is published in the Appendix, in which is shown the acreage and the production of fruit returned in the agricultural books, but the cultivation of which has not assumed sufficient importance to be tabulated in the detailed tables. There were 16 kinds of fruit specially returned in addition to those already commented upon, of some of which the following are the particulars:—

COCOANUTS grown on the islands fringing the northern coast line and in Torres Straits occupied 667 acres in 1902, yielding 12,900 dozen, practically the same area as in 1901, when, however, only 8,757 dozen were obtained.

PLUMS.—An area of 113 acres was returned in 1902, from which 1,775 bushels were gathered; whilst in 1901, 94 acres yielded 5,443 bushels.

There appears no reason why the production of this fruit should not largely extend. It is in great demand for household use and jam-making, whilst its cultivation line for one variety or another covers a wide area.

PEACHES.—From the 88 acres returned, 3,537 bushels were obtained last year, the 84 acres recorded in 1901 giving 7,140 bushels. This fruit is so largely cultivated in areas too small to be returned that the output recorded must be far short of the actual production.

CAPE GOOSEBERRIES.—Only 76 acres were under this crop in 1902, and produced 29,530 quarts, whilst from 168 acres in 1901, 88,260 quarts were gathered.

PASSION FRUIT.—Thirty-six acres yielded 2,161 bushels in 1902, against 4,545 bushels from 32 acres in the previous year.

APRICOTS returned 1,460 bushels from 25 acres, and 1,306 bushels from 19 acres in 1902 and 1901 respectively.

CHERRIES grown in the western portion of the Southern Division were returned in 1902 as grown on 21 acres, from which 73 bushels were obtained; like figures for 1901, 20 acres, 190 bushels.

LEMONS.—6,244 dozen were obtained from 18 acres last year, and 16,192 dozen from 28 acres in 1901.

CUSTARD-APPLES increased in area from 4 acres in 1901 to 17 acres in 1902, the yield obtained being 285 and 221 bushels respectively.

PEARS.—From 14 acres 191 bushels were obtained in 1902, whilst from 15 acres in 1901, 381 bushels were returned.

#### OTHER VEGETABLES.

Although chiefly included under the heading of market gardens, yet certain crops were cultivated in sufficient areas to be particularly described, as will be seen by reference to Table No. XV. of the Appendix. A summary of the information therein, as far as it applies to these, is as follows:—

	1901.		1902.		
	Acres.	Produce.	Acres.	Produce.	
Cabbages	... ... ...	672	269,630 dozen	286	100,920 dozen
Tomatoes	... ... ...	260	25,622 bushels	234	22,649 bushels
Cucumbers	... ... ...	198	100,887 dozen	183	44,485 dozen
Yams	... ... ...	81	61 tons	88	74 tons
Beans	... ... ...	56	5,458 bushels	58	4,872 bushels
Turnips	... ... ...	331	2,645 tons	34	85 tons
Peas	... ... ...	82	5,276 bushels	26	1,215 bushels
Onions	... ... ...	179	9,148 cwt.	22	1,036 cwt.

#### MISCELLANEOUS CROPS.

BROOM MILLET.—The area planted in 1902—42 acres—was only about one-half that returned in 1901—81 acres—and the yield in the former year barely one-third of that in the latter year—namely: 16,742 lb., against 50,476 lb., the average yields being:—1901, 623 lb. per acre; and 1902, 399 lb. per acre.

Full information is furnished in the following table:—

## X.

Division and District.	BROOM.				Increase or Decrease — 1902.	Increase or Decrease — 1902.	AVERAGE YIELD PER ACRE.	
	1901.		1902.				1901.	1902.
<i>Southern (East)—</i>								
Dugandan ... ...	22	18,676	13	3,250	— 9	— 15,426	849	250
Gatton ... ... ...	...	...	3	1,680	3	1,680	...	560
Goodna ... ... ...	5	1,680	...	...	— 5	— 1,680	336	...
Laidley ... ... ...	6	3,360	15	4,480	9	1,120	560	299
Logan ... ... ...	14	8,840	11	7,332	— 3	— 1,508	631	667
South Brisbane ... ...	4	4,480	...	...	— 4	— 4,480	1,120	...
Toowoomba ... ... ...	30	13,440	...	...	— 30	— 13,440	448	...
Total ... ... ...	81	50,476	42	16,742	— 39	— 33,734	623	399

From only four districts was any return of broom millet made—Laidley, 15 acres, for 4,480 lb.; Dugandan, 13 acres, for 3,250 lb.; Logan, 11 acres, for 7,332 lb.; and Gatton, 3 acres, for 1,680 lb. The average yield in the Logan district was better in 1902 than in 1901, the figures being 667 lb. and 631 lb. per acre respectively.

The quantity of broom millet manufactured into brooms, &c., during 1901 and 1902 appears in the following statement, the necessary particulars having been kindly furnished by the manufacturers:—

## X a.

Year.	Total. lb.	Queensland Grown. lb.		Grown Elsewhere. lb.
		1900	1901	
1900 ... ...	107,520	84,000	...	23,520
1901 ... ...	139,440	34,720	...	104,720
1902 ... ...	172,127	34,828	...	137,299
Mean of 3 years ...	139,696	51,183	...	88,513

So that in 1901 home-produced millet comprised 25 per cent., and in 1902 20 per cent. of the raw material utilized. The total amount of broom millet used in manufacture, however, advanced 23 per cent. during the year, showing that the demand is likely to increase, and that with the return of good seasons the cultivation of broom millet offers a fair return to the farmer, and in time may reasonably be expected to assume some importance.

The quantity shown as available for consumption, on the basis of adding the production to the net imports, approximates fairly closely to the actual consumption, as shown by manufacturers' returns, as will be seen from the following table:—

## X b.

Year.	Imports.	Exports.	Net Imports.	Production.	Quantity Available.	Actually Consumed.
1900 ... ...	91,000	...	91,000	51,240	142,240	107,520
1901 ... ...	107,120	...	107,120	50,476	157,596	139,440
1902 ... ...	144,500	2,300	142,200	16,742	158,942	172,127
Mean (3 years) ...	114,207	767	113,440	39,486	152,926	139,696

After allowance is made for waste and for that portion of the production counted by the farmers as a part of his crop, but rejected by the manufacturer on account of quality, a difference of 9 per cent. is not material. The whole of the broom millet imported during the past three years was from New South Wales.

MANGEL-WURZEL.—Owing to the drought, this cattle food crop, which in past years had assumed some importance, did not receive much attention during 1902. From 9 acres returned, 48 tons were harvested.

## HAY CROPS.

The acreage returned as under hay last year was less than one-third of that so returned in 1901, whilst the produce obtained was less than one-fifth of that year's crop.

Particulars respecting six different kinds of crops are individually recorded—namely: Wheat, oats, barley, rye, lucerne, panicum, and other sown grasses. There were decreases in both area and produce of all but the last-named.

Full information as to the hay crop for the year 1902 is given at Table No. XVI. in the Appendix, a summary of which is given in the following statement:—

## Y.

		1901.	1902.	Increase or Decrease —	1901.	1902.	Increase or Decrease —
		Acres.	Acres.	Acres.	Tons.	Tons.	Tons.
Wheat	...	9,719	867	— 8,852	15,096	1,049	— 14,047
Oats	...	17,167	2,619	— 14,548	36,321	3,915	— 32,406
Barley	...	310	50	— 260	600	60	— 540
Rye	...	502	122	— 380	972	208	— 764
Lucerne	...	34,177	15,213	— 18,964	66,888	16,146	— 50,742
Panicum	...	1,165	1,142	— 23	2,102	1,714	— 388
Other Sown Grasses	...	15	55	40	60	89	29
Total	...	63,055	20,068	— 42,987	122,039	23,181	— 98,858

There were 63,055 acres mown for hay in 1901, against 20,068 last year, the tonnage obtained being in 1901, 122,039, and in 1902, 23,181, showing decreases in area of 42,987 acres, and in yield of hay of 98,858 tons.

In areas, the greatest actual decrease was in lucerne, which fell from 34,177 acres in 1901 to 15,213 acres in 1902, although the decrease of 14,548 acres in oats, from 17,167 acres in 1901, was a much larger relative one. Wheat, from an acreage of 9,719, declined to 867 acres last year.

Of hay harvested the largest tonnage was of lucerne, the 16,146 tons of which produced in 1902 fell short of the crop for the previous year by 50,742 tons. Oaten hay returned only 3,915 tons in 1902, against 36,321 tons in 1901, or a decrease of 32,406 tons, and wheaten hay fell from 15,096 tons to 1,049, a decrease of 14,047 tons.

The average yields last year were much below those for 1901, the decrease in production being more accentuated than that in acreage, the average yield for all hay crops being—for 1901, 1.94 tons; for 1902, 1.16 tons. The average yield for each kind of hay for 1901 and 1902, respectively, were—Wheat, 1.55 and 1.21; oats, 2.12 and 1.49; barley, 1.94 and 1.20; rye, 1.94 and 1.70; lucerne, 1.96 and 1.06; panicum, 1.80 and 1.50; other sown grasses, 4.00 and 1.62. Lucerne would appear the crop that suffered most from the drought, both with regard to reduced production and average yield, and this would appear to have been recognised by agriculturists, as shown by the reduced acreage under this crop. Panicum fully upheld its reputation as a drought-resisting hay crop, returning for 1902 the best average yield of the named hay crops, if the small area under rye be excepted, but the area planted for some years past has been insignificant.

## GREEN FORAGE CROPS.

On reference to Appendix Table No. XVII., full information can be obtained as to the various kinds of green food crops grown, and also as to the principal districts in which they were cultivated. There were 51,279 acres devoted to the production of green forage in 1902, against 39,793 acres in 1901, or an increase of 11,486 acres; but, inasmuch, owing to the peculiar circumstances of the season, there were 15,107 acres of sugar-cane thus utilized, and only 595 acres in 1901, it follows that, but for this exceptional incident there would have been a decrease, although there was a substantial increase of 10,783 acres in maize, which in part counterbalanced the decreases of acreage shown under every other green crop tabulated.

The following statement shows the acreage under each kind of forage crop for 1901 and 1902, with the increase or decrease in the latter year:—

Crop.	1901.	1902.	Increase, or Decrease —
	Acres.	Acres.	Acres.
Wheat	3,523	607	— 2,916
Oats	4,561	1,462	— 3,099
Barley	4,704	1,093	— 3,611
Rye	854	307	— 547
Maize	10,501	21,284	10,783
Sugar-cane	595	15,107	14,512
Sorghum	3,101	2,077	— 1,024
Lucerne	10,674	8,710	— 1,964
Panicum	718	456	— 262
Other	562	176	— 386
Total	39,793	51,279	11,486

No doubt the large increase in maize already referred to, resulted from the conversion of the produce of areas intended for grain into green forage in response to the demand for this commodity.

## ARTIFICIALLY SOWN PASTURE.

The area of land under grasses that have been artificially sown decreased by 10,393 acres—namely: From 34,679 in 1901 to 24,286 last year. The following table furnishes particulars as to this pasture for the past two years:—

Z.

Division.	District.	1901.	1902.	Increases, or Decrease —.
Southern—		Acres.	Acres.	
East ...	Esk ... ... ... ...	680	731	51
	Gatton ... ... ... ...	1,456	1,100	— 356
	Maroochy ... ... ... ...	1,174	1,393	219
	Other Districts ... ... ... ...	701	960	259
	Total South-east ... ...	4,011	4,184	173
West ...	Allora ... ... ... ...	3,775	8,022	4,247
	Cunnamulla ... ... ... ...	10	1,060	1,050
	Dalby ... ... ... ...	882	131	— 751
	Killarney ... ... ... ...	936	90	— 846
	Toowoomba ... ... ... ...	16,958	5,262	— 11,696
	Warwick ... ... ... ...	6,390	3,829	— 2,561
	Other Districts ... ... ... ...	656	4	— 652
	Total South-west ... ...	29,607	18,398	— 11,209
	Total South ... ...	33,618	22,582	— 11,036
Central ...	Rockhampton ... ... ... ...	56	640	584
	Other Districts ... ... ... ...	227	10	— 217
	Total Central ... ...	283	650	367
North ...	Herberton ... ... ... ...	490	1,002	512
	Other Districts ... ... ... ...	288	52	— 236
	Total North ... ...	778	1,054	276
	Total State ... ...	34,679	24,286	— 10,393

With the exception of Allora, the whole of the Downs shows decreases in 1902, amounting, in the case of Toowoomba, to nearly 12,000 acres. It is very doubtful whether some of this pasture had entirely died out, and has not with recent rains again revived, forming at the present time some of the artificially sown pasture of the State; but the collectors report that at the time of collection the farmers considered that the drought had effectually destroyed the grass roots.

## ENSILAGE.

With a ready demand for every ton of green forage naturally grown last year, and with practically no surplus available to conserve, it is not surprising to find a very marked decrease in ensilage made. Particulars as to the quantity of fodder placed in silo during 1902 are given in the following table:—

Z a.

## ENSILAGE.

District.	1901.	1902.	Increase. 1902.	Decrease. 1902.
			Tons.	Tons.
Allora ... ... ... ...	175	... 70	... 70	175
Barcaldine ... ... ... ...	50	... 2	... 2	50
Cunnamulla ... ... ... ...	10	... 1	... 1	8
Dalby ... ... ... ...	114	... 1	... 1	114
Gympie ... ... ... ...	402	... 100	... 100	402
Harrisville ... ... ... ...	1	... 20	... 20	1
Ingham ... ... ... ...	70	... 5	... 5	50
Maroochy ... ... ... ...	...	100	100	...
Mareeba ... ... ... ...	46	... 20	... 20	41
Rockhampton ... ... ... ...	8	... 2	... 2	8
Springsure ... ... ... ...	...	... 2	... 2	...
Stanhope ... ... ... ...	2	... 10	... 10	2
Tiaro ... ... ... ...	10	... 10	... 10	10
Warwick ... ... ... ...	888	217	... 671	671

The weight of ensilage for 1902 was less than one-fourth of that for 1901—namely: 217 tons, instead of 888 tons, or a decrease of 671 tons. With the lesson taught by the late drought, it is to be hoped that the more favourable seasons apparently approaching will be taken more advantage of than has been the practice during past favourable years, and that the silo will be freely availed of as a means of laying by a store of fodder for "a rainy (droughty?) day."

J. HUGHES,

Registrar-General.

# APPENDIX.

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## LIVE STOCK.

Table No. I.

RETURN of the NUMBER of HORSES, CATTLE, SHEEP, and PIGS, in the various PETTY SESSIONS DISTRICTS comprised in the SOUTHERN DIVISION of the STATE on the 31st DECEMBER, 1902.

Petty Sessions Districts.	Horses.	Cattle.	Sheep.	Pigs.	Petty Sessions Districts.	Horses.	Cattle.	Sheep.	Pigs.
Adavale	1,547	7,495	170,929	30	Laidley	3,123	10,605	35	2,012
Allora	5,794	12,236	40,193	2,945	Logan	2,172	8,102	53	1,238
Augathella	1,420	8,227	108,306	16	Marburg	1,813	6,972	...	2,570
Beaudesert	4,025	37,417	418	3,335	Maroochy	1,658	5,987	80	980
Biggenden	1,269	7,884	384	311	Maryborough	4,937	13,067	232	1,107
Bollon	2,653	16,607	240,667	85	Mitchell	3,552	31,786	65,424	172
Brisbane	6,012	10,455	653	2,583	Nanango	5,502	45,164	15,167	754
Bundaberg	6,844	29,195	500	2,568	Nerang	2,318	11,222	100	1,796
Caboolture	1,054	6,110	115	988	Redcliffe	1,830	8,676	20	1,815
Charleville	2,607	14,301	125,532	196	Roma	3,521	14,891	88,123	616
Childers	2,489	3,575	1,260	927	Rosewood	2,582	12,013	519	2,065
Cleveland	539	1,455	23	202	St. George	2,589	3,901	289,121	103
Condamine	1,082	12,710	3,222	169	South Brisbane	3,452	5,377	1,225	832
Crow's Nest	3,021	17,526	1,986	1,949	Southwood	303	3,829	10,797	26
Cunnamulla	2,333	8,746	491,626	106	Stanthorpe	2,622	17,048	54,134	286
Dalby	6,820	19,785	237,812	157	Surat	1,285	6,054	63,701	33
Diamantina (one-half)	1,806	11,612	43,902	...	Tambo	1,685	7,045	174,062	53
Dugandan	3,322	20,051	240	1,991	Taroom	2,023	23,227	9,058	10
Eidsvold	3,137	44,779	12,088	80	Tenningering	1,571	10,724	121	78
Esk	5,308	58,487	980	1,641	Texas	1,125	5,988	3,728	50
Eulo	515	1,380	60,737	42	Thargomindah	5,076	20,152	104,427	89
Gatton	5,160	21,001	275	3,773	Tiaro	4,803	27,534	9,728	995
Gayndah	4,744	75,347	487	217	Toowoomba	11,101	27,340	258,166	6,300
Gin Gin	2,851	27,147	427	721	Warwick	7,580	27,504	103,643	2,985
Goodna	515	1,271	20	204	Windorah (one-half)	1,920	8,315	108,252	16
Goondiwindi	1,305	4,608	31,768	47	Woodford	2,519	16,905	154	632
Gympie	6,237	37,610	5,689	1,415	Yeulba	712	3,037	606	110
Harrisville	2,427	14,142	403	1,792	Total for 1902	181,115	950,575	3,084,701	60,679
Highfields	2,538	7,874	1,801	1,837	Total for 1901	211,068	1,543,804	4,686,349	97,745
Hungerford	604	842	75,822	10	Increase in 1902	...	...	...	...
Inglewood	1,596	10,764	64,275	369	Decrease in 1902	29,953	593,229	1,601,648	37,066
Ipswich	4,152	13,081	234	1,619					
Killarney	2,015	4,390	1,251	631					

Table No. II.

RETURN of the NUMBER of HORSES, CATTLE, SHEEP, and PIGS, in the various PETTY SESSIONS DISTRICTS comprised in the CENTRAL DIVISION of the STATE on 31st DECEMBER, 1902.

Petty Sessions Districts.	Horses.	Cattle.	Sheep.	Pigs.	Petty Sessions Districts.	Horses.	Cattle.	Sheep.	Pigs.
Alpha	2,164	13,325	14,068	147	Mount Morgan	3,670	6,243	14,783	74
Aramac	1,080	2,101	71,483	10	Muttaburra	3,009	6,334	284,821	22
Banana	2,357	21,919	10,040	11	Rockhampton	20,830	92,032	50,855	2,570
Barcaldine	2,234	1,228	318,025	150	St. Lawrence	3,849	38,937	318	150
Blackall	2,856	2,586	273,756	69	Springsure	3,287	15,834	15,473	162
Clermont	4,454	15,914	112,754	279	Windorah (one-half)	1,920	8,315	108,252	15
Diamantina (one-half)	1,806	11,611	43,902	...					
Emerald	949	1,878	402	155	Total for 1902	79,780	336,405	2,307,992	5,384
Gladstone	9,373	57,878	18,286	485	Total for 1901	102,993	766,735	3,305,087	8,612
Isisford	2,353	3,341	301,915	15	Increase for 1902	...	...	...	...
Longreach	4,702	5,925	662,578	54	Decrease for 1902	23,213	430,330	997,095	3,228
Mackay (Nebo collections, say six-elevenths)	8,887	31,004	6,281	1,016					

Table No. III.

RETURN of the NUMBER of HORSES, CATTLE, SHEEP, and PIGS, in the various PETTY SESSIONS DISTRICTS comprised in the NORTHERN DIVISION of the STATE on 31st DECEMBER, 1902.

Petty Sessions Districts.	Horses.	Cattle.	Sheep.	Pigs.	Petty Sessions Districts.	Horses.	Cattle.	Sheep.	Pigs.
Ayr ...	4,733	22,614	14,267	546	Mourilyan ...	998	793	21	141
Boulia ...	6,754	65,591	101,818	8	Norman ...	7,177	241,910	79,794	185
Bowen ...	10,459	72,817	33,730	577	Palmer ...	3,447	12,678	... 45	63
Burke ...	7,799	148,588	32,358	102	Ravenswood ...	2,266	7,833	356	
Cairns ...	2,303	3,686	3,320	1,470	Somerset ...	148	525	214	
Camooweal ...	2,248	31,910	24,804	3	Thornborough ...	3,220	32,398	112	
Cape River ...	3,859	32,347	236	151	Townsville ...	6,808	13,809	51	1,161
Cardwell ...	1,375	11,233	...	424	Winton ...	6,311	19,273	444,238	71
Charters Towers ...	11,505	66,032	749	940					
Cloncurry ...	8,333	113,168	389,929	98	Total for 1902 ...	138,227	1,256,491	1,821,292	11,139
Cook ...	3,908	27,796	...	255	Total for 1901 ...	148,058	1,462,168	2,039,535	15,284
Croydon ...	2,894	32,621	...	152	Increase for 1902 ...	...	...	...	
Douglas ...	868	662	...	436	Decrease for 1902 ...	9,831	205,677	218,243	4,145
Etheridge ...	6,896	85,558	...	188					
Herberton ...	7,755	42,371	3,694	849	Total in State, 1902	399,122	2,543,471	7,213,985	77,202
Hughenden ...	10,980	123,339	685,115	310	Total in State, 1901	462,119	3,772,707	10,030,971	121,641
Ingham ...	6,490	19,585	1,109	1,396	Increase in 1902 ...	...	...	...	
Mackay (less Nebo collections, say five-eleveths)	7,405	25,836	5,234	845	Decrease in 1902 ...	62,997	1,229,236	2,816,986	44,439
Mareeba ...	1,288	1,518	780	86					

Table No. IV.

RETURN of the NUMBER of CATTLE and SHEEP in the various PETTY SESSIONS DISTRICTS comprised in the SOUTHERN DIVISION of the STATE for the Years 1901 and 1902, together with the INCREASE or DECREASE in the latter Year.

Petty Sessions Districts.	Cattle.				Sheep.			
	1901.	1902.	Increase.	Decrease.	1901.	1902.	Increase.	Decrease.
Adavale ...	8,889	7,495	...	1,394	182,543	170,929	...	11,614
Allora ...	16,796	12,236	...	4,560	70,995	40,193	...	30,802
Angathella ...	19,037	8,227	...	10,810	106,803	108,306	1,503	...
Beaudesert ...	49,030	37,417	...	11,613	290	418	128	...
Biggenden ...	11,540	7,884	...	3,656	4	384	380	...
Bollon ...	16,855	16,607	...	248	143,642	240,667	97,025	...
Brisbane ...	13,672	10,455	...	3,217	1,157	653	...	504
Bundaberg ...	43,888	29,195	...	14,693	1,528	500	...	1,028
Caboolture ...	8,392	6,110	...	2,282	116	115	1	...
Charleville ...	21,278	14,301	...	6,977	148,087	125,532	...	22,555
Childers ...	4,097	3,575	...	522	1,677	1,260	...	417
Cleveland ...	1,581	1,455	...	126	378	23	...	355
Condamine ...	27,780	12,710	...	15,070	6,366	3,222	...	3,144
Crow's Nest ...	19,781	17,526	...	2,255	361	1,986	1,625	...
Cunnamulla ...	16,068	8,746	...	7,322	520,992	491,626	...	29,366
Dalby ...	47,382	19,785	...	27,597	577,667	237,812	...	339,855
Diamantina (one-half) ...	9,489	11,612	2,123	...	154	43,902	43,748	...
Dugandan ...	27,083	20,051	...	7,032	179	240	61	...
Eidsvold ...	71,355	44,779	...	26,576	17,057	12,088	...	4,969
Esk ...	75,749	58,487	...	17,262	1,130	980	...	150
Eulo ...	2,294	1,380	...	914	42,237	60,737	18,500	...
Gatton ...	28,668	21,001	...	7,667	773	275	...	498
Gayndah ...	132,073	75,347	...	56,726	896	487	...	409
Gin Gin ...	36,473	27,147	...	9,326	588	427	...	161
Goodna ...	3,041	1,271	...	1,770	59	20	...	39
Goondiwindi ...	21,298	4,608	...	16,690	301,985	31,768	...	270,217
Gympie ...	50,223	37,610	...	12,613	2,002	5,689	3,687	...
Harrisville ...	21,474	14,142	...	7,332	2,220	403	...	1,817
Highfields ...	8,276	7,874	...	402	1,842	1,801	...	41
Hungerford ...	951	842	...	109	81,316	75,822	...	5,494
Inglewood ...	19,626	10,764	...	8,862	91,579	64,275	...	27,304
Ipswich ...	23,301	13,081	...	10,220	415	234	...	181
Killarney ...	4,991	4,390	...	601	850	1,251	401	...
Laidley ...	17,589	10,605	...	6,984	194	35	...	159
Logan ...	13,575	8,102	...	5,473	24	53	29	...
Marburg ...	10,775	6,972	...	3,803	...	...	...	...
Maroochy ...	8,148	5,987	...	2,161	174	80	...	94
Maryborough ...	20,114	13,067	...	7,047	280	232	...	48
Mitchell ...	52,060	31,786	...	20,274	113,221	65,424	...	47,797
Nanango ...	78,324	45,164	...	33,160	9,657	15,167	5,510	...
Nerang ...	12,730	11,222	...	1,508	65	100	35	...
Redcliffe ...	12,520	8,676	...	3,844	...	20	20	...
Roma ...	50,035	14,891	...	35,144	172,284	88,123	...	84,161
Rosewood ...	20,166	12,013	...	8,153	210	519	309	...
St. George ...	6,279	3,901	...	2,378	388,528	289,121	...	99,407
South Brisbane ...	8,775	5,377	...	3,398	912	1,225	313	...
Southwood ...	10,697	3,829	...	6,868	37,917	10,797	...	27,120
Stanthorpe ...	20,997	17,048	...	3,949	77,528	54,134	...	23,394
Surat ...	11,132	6,054	...	5,078	228,671	63,701	...	164,970
Tambo ...	2,462	7,045	4,583	...	239,828	174,062	...	65,766
Taroom ...	114,926	23,227	...	91,699	23,699	9,058	...	14,641
Tenningering ...	16,075	10,724	...	5,351	112	121	9	...
Texas ...	10,710	5,988	...	4,722	5,789	3,728	...	2,061
Thargomindah ...	15,159	20,152	4,993	...	108,118	104,427	...	3,691
Tiaro ...	42,319	27,534	...	14,785	444	9,728	9,284	...
Toowoomba ...	41,204	27,340	...	16,864	683,526	258,166	...	425,360
Warwick ...	39,621	27,504	...	12,117	194,726	103,643	...	91,083
Windorah (one-half) ...	8,873	8,315	...	558	91,705	108,252	16,547	...
Woodford ...	25,263	16,905	...	8,358	210	154	...	56
Yeilba ...	7,845	3,037	...	4,808	639	606	...	33
Totals ...	1,543,804	950,575	...	593,229	4,686,349	3,084,701	...	1,601,648

Table No. V.

RETURN of the NUMBER of CATTLE and SHEEP in the various PETTY SESSIONS DISTRICTS comprised in the CENTRAL DIVISION of the STATE for the Years 1901 and 1902, together with the INCREASE or DECREASE in the latter Year.

Petty Sessions Districts.	Cattle.				Sheep.			
	1901.	1902.	Increase.	Decrease.	1901.	1902.	Increase.	Decrease.
Alpha	49,242	13,325	...	35,917	4,969	14,068	9,099	...
Aramac	3,540	2,101	...	1,439	91,454	71,483	...	19,971
Banana	74,962	21,919	...	53,043	10,688	10,040	...	648
Barcaldine	1,708	1,228	...	480	449,345	318,025	...	131,320
Blackall	3,446	2,586	...	860	450,350	273,756	...	176,594
Clermont	87,414	15,914	...	71,500	178,028	112,754	...	65,274
Diamantina (one-half)	9,489	11,611	2,122	...	154	43,902	43,748	...
Emerald	19,162	1,878	...	17,284	3,106	402	...	2,704
Gladstone	81,498	57,878	...	23,620	8,223	18,286	10,063	...
Isisford	3,496	3,341	...	155	306,051	301,915	...	4,136
Longreach	7,920	5,925	...	1,995	919,790	662,578	...	257,212
Mackay (Nebo collections, say six-elevenths)	50,968	31,004	...	19,964	9,161	6,281	...	2,880
Mount Morgan	9,631	6,243	...	3,388	1,935	14,783	12,848	...
Muttaburra	10,303	6,334	...	3,969	566,700	284,821	...	281,879
Rockhampton	145,270	92,032	...	53,238	23,663	50,855	27,192	...
St. Lawrence	89,890	38,937	...	50,953	953	318	...	635
Springsure	109,923	15,834	...	94,089	188,812	15,473	...	173,339
Windorah (one-half)	8,873	8,315	...	558	91,705	108,252	16,547	...
Totals	766,735	336,405	...	430,330	3,305,087	2,307,992	...	997,095

Table No. VI.

RETURN of the NUMBER of CATTLE and SHEEP in the various PETTY SESSIONS DISTRICTS comprising the NORTHERN DIVISION of the STATE for the Years 1901 and 1902, together with the INCREASE or DECREASE in the latter Year.

Petty Sessions Districts.	Cattle.				Sheep.			
	1901.	1902.	Increase.	Decrease.	1901.	1902.	Increase.	Decrease.
Ayr	22,256	22,614	358	...	149	14,267	14,118	...
Boulia	55,245	65,591	10,346	...	110,309	101,818	...	8,491
Bowen	109,695	72,817	...	36,878	4,415	33,730	29,315	...
Burke	141,379	148,588	7,209	...	602	32,358	31,756	...
Cairns	3,253	3,686	433	...	111	3,320	3,209	...
Camooweal	32,887	31,910	...	977	13,000	24,804	11,804	...
Cape River	69,665	32,347	...	37,318	106	236	130	...
Cardwell	7,495	11,233	3,738	...	...	...	...	...
Charters Towers	98,333	66,032	...	32,301	1,958	749	...	1,209
Clonecurry	147,034	113,168	...	33,866	242,484	389,929	147,445	...
Cook	28,877	27,796	...	1,081	...	...	...	...
Croydon	33,485	32,621	...	864	...	...	...	...
Douglas	670	662	...	8	...	...	...	...
Etheridge	76,688	85,558	8,870	...	...	...	...	...
Herberton	42,152	42,371	219	...	82	3,694	3,612	...
Hughenden	180,011	123,339	...	56,672	859,892	685,115	...	174,777
Ingham	24,192	19,585	...	4,607	141	1,109	968	...
Mackay (less Nebo collections, say five-elevenths)	42,474	25,836	...	16,638	7,634	5,234	...	2,400
Mareeba	2,705	1,518	...	1,187	13	780	767	...
Mourilyan	966	793	...	173	3	21	18	...
Norman	233,701	241,910	8,209	...	37,512	79,794	42,282	...
Palmer	15,753	12,678	...	3,075	...	...	...	...
Ravenswood	10,053	7,833	...	2,220	30	45	15	...
Somerset	1,011	525	...	486	...	...	...	...
Thornborough	34,228	32,398	...	1,830	...	...	...	...
Townsville	19,087	13,809	...	5,278	90	51	...	39
Winton	28,873	19,273	...	9,600	761,004	444,238	...	316,766
Totals	1,462,168	1,256,491	...	205,677	2,039,535	1,821,292	...	218,243

Table No. VII.

RETURN of LIVE STOCK SLAUGHTERED for PRESERVATION as Food, or FREEZING or for TALLOW, in the STATE, during the YEARS 1893-1902, with the Quantity of MEAT, TALLOW, LARD, &amp;c., produced.

Year.		Number of Establishments.	Average Number of Hands Employed.	NUMBER SLAUGHTERED.						MEAT PRESERVED OR FROZEN.						Extract and Essence of Meat Produced.	Quantity of Tallow Produced.	Quantity of Lard Produced.			
				Cattle.			Sheep.			Hogs. *	Beef.		Mutton.		Bacon. §						
				For Freezing.	For Preserv-ing.	For Boiling Down.	For Freezing.	For Preserv-ing.	For Boiling Down.		Frozen.	Preserved.	Frozen.	Preserved.							
1893	...	25	1,129	39,828	43,543	41,166	66,025	150,668	1,070,082	56,145	lb. 28,137,501	lb. 7,751,031	lb. 2,851,255	lb. 1,726,541	lb. 3,971,018	lb. 228,264	tons. 11,183	lb. 56,764			
1894	...	31	1,127	48,558	77,916	67,611	57,787	394,405	417,328	48,539	lb. 33,305,023	lb. †17,640,457	lb. 2,749,042	lb. 5,862,373	lb. 4,695,280	lb. 168,805	tons. 15,683	lb. 84,070			
1895	...	39	2,848	80,487	104,969	98,374	75,600	385,060	743,257	58,870	lb. 50,349,956	lb. ‡9,849,396	lb. 3,064,458	lb. 5,088,502	lb. 4,941,512	lb. 511,533	tons. 21,263	lb. 159,093			
1896	...	35	2,838	76,483	77,719	87,562	100,550	262,151	430,696	67,084	lb. 50,245,213	lb. a19,197,234	lb. 4,571,086	lb. 2,914,902	lb. 5,108,726	lb. 517,011	tons. 12,736	lb. 203,972			
1897	...	38	2,604	111,267	62,342	85,754	70,865	259,536	615,454	76,719	lb. 62,764,267	lb. b35,037,555	lb. 2,952,290	lb. 1,970,959	lb. 6,103,485	lb. 463,386	tons. 13,651	lb. 167,743			
1898	...	46	2,876	112,940	65,966	147,528	61,258	69,006	146,845	85,510	lb. 64,676,868	lb. c25,181,919	lb. 2,355,030	lb. 967,363	lb. 6,973,007	lb. 1,593,285	tons. 13,609	lb. 216,194			
1899	...	47	3,156	117,668	140,815	127,983	119,964	144,345	215,509	101,704	lb. 78,173,578	lb. d47,223,452	lb. 4,966,390	lb. 2,616,318	lb. 7,147,760	lb. 1,925,193	tons. 19,165	lb. 222,460			
1900	...	33	2,540	150,057	108,975	21,022	50,719	75,887	25,049	90,608	lb. 91,006,191	lb. e34,264,575	lb. 2,285,758	lb. 1,379,785	lb. 7,685,446	lb. 759,193	tons. 9,657	lb. 381,695			
1901	...	26	1,879	140,011	57,447	2,285	64,121	67,692	301	104,017	lb. 90,053,829	lb. f29,905,920	lb. 3,337,332	lb. 2,827,247	lb. 7,064,714	lb. 333,014	tons. 8,231	lb. 405,181			
1902	Metropolitan	5	...																		
	Bowen	1	...																		
	Burke	1	...																		
	Caboolture	1	...																		
	Charters Towers	1	...																		
	Esk	2	...																		
	Gladstone	1	...																		
	Goodna	1	...																		
	Harrisville	1	...																		
	Mackay	1	...																		
	Maryborough	1	...																		
	Nanango	2	...																		
	Rockhampton	1	...																		
	Townsville	2	...																		
	Warwick	1	...																		

\* Including pigs killed by farmers for conversion into bacon or pork.

§ Exclusive of pork (fresh and salt), made by farmers, in addition to their bacon.

d. Includes 1,192,152 lb. salted.

e. Includes 1,153,285 lb. salted.

† Includes 682,955 lb. salted.

a. Includes 182,586 lb. salted.

b. Includes 106,499 lb. salted.

f. Includes 173,716 lb. salted.

g. Includes 479,138 salted.

‡ Includes 326,232 lb. salted.

c. Includes 1,972,000 lb. salted.

h. Includes 3,970 salted.

Table No. VIII.  
OTHER PRODUCTS of MEAT PRESERVING, &c., ESTABLISHMENTS in the STATE—RETURN for EIGHT YEARS.

Year.	No.	Manure.		Edible Fats.		Hides.		Skins.		Bones.		Horns and Hoofs.	Hair.		Oils, &c.		Other.*	Total Value.	
		Tons	£	lb.	£	Number.	£	Number.	£	Tons	£	lb.	£	Gallons.	£		£		
1895	...	36	4,505	11,124	560,219	6,599	280,781	161,795	1,170,559	160,545	1,332	5,001	3,905	59,434	1,979	28,454	2,661	...	353,609
1896	...	35	7,321	13,627	597,000	1,950	239,305	141,559	770,482	119,370	683	2,808	2,288	39,220	1,238	23,782	2,350	...	285,190
1897	...	38	10,738	24,654	673,385	8,455	259,160	161,979	928,330	125,043	954	3,696	3,307	76,539	1,848	18,478	1,819	...	330,801
1898	...	46	15,072	36,133	1,083,523	14,189	325,933	227,175	275,824	39,736	991	4,685	5,615	72,358	1,871	27,678	2,899	...	332,303
1899	...	47	17,347	56,446	985,121	13,163	395,929	337,931	524,215	97,016	1,265	6,363	10,819	92,487	2,359	26,000	2,831	...	526,928
1900	...	27	9,519	31,518	1,362,786	19,792	265,051	235,239	191,445	28,850	655	3,739	12,900	39,089	2,001	17,590	2,022	9,073	345,134
1901	...	18	4,937	21,999	1,382,080	21,244	182,708	180,673	187,126	14,847	522	2,873	5,321	34,670	1,820	16,916	2,218	8,668	259,663
1902	...	18	3,654	14,274	1,191,572	21,572	178,090	170,874	275,176	26,311	578	3,824	3,649	16,310	860	18,769	2,283	6,613	243,647

\* Not compiled prior to 1900.

Table No. IX.

RETURN showing the NUMBER of CATTLE, SHEEP, &c., SLAUGHTERED (under the supervision of Inspectors of Slaughter-Houses only) for CONSUMPTION for FOOD in EACH of the DIVISIONS of the STATE, together with the AVERAGE DEAD WEIGHT of each ANIMAL and the ESTIMATED QUANTITY CONSUMED per CAPITA, for 1902.

DIVISION.	*POPULATION.	NUMBER SLAUGHTERED.					AVERAGE DEAD WEIGHT.					LB. CONSUMED PER CAPITA.						
		Estimated or the Year.	Cattle.	Sheep.	Calves.	Lambs.	Pigs.	Cattle.	Sheep.	Calves.	Lambs.	Pigs.	Beef.	Mutton.	Veal.	Lamb.	Pork.	
Southern ...	303,970	84,316	278,861	8,881	5,896	19,065	551	lb.	lb.	lb.	lb.	lb.	153	32	1½	½	5	192
Central ...	36,598	13,659	42,349	497	518	4,346	495	37	100	24	55	185	43	1½	½	6½	236	
Northern ...	111,051	50,995	78,202	541	612	9,976	534	36	97	24	71	245	25	½	...	6	276	
Total ...	451,619	148,970	399,412	9,919	7,026	33,387	540	35	58	25	77	177	31	1	½	6	215	

\* The figures quoted in this column refer to the estimated number of consumers returned by inspectors of slaughter-houses.

## AGRICULTURE.

Table No. X.

RETURN showing the TOTAL EXTENT of LAND under CULTIVATION, and the AREA under each DESCRIPTION of CROP, in the several PETTY SESSIONS DISTRICTS of the STATE of QUEENSLAND during the Year 1902.

Table No. X.—*continued.*

Table No. X.—*continued.*

Table No. XI.

RETURN showing the GROSS PRODUCE of PRINCIPAL CROPS Raised in the several PETTY SESSIONS DISTRICTS of the STATE of QUEENSLAND during the Year ended 31st December, 1902.

PETTY SESSIONS DISTRICTS.	QUANTITY OF PRODUCE.																													
	GRAIN CROPS.								POTATOES.		Pumpkins and Melons.		SUGAR-CANE.		Arrowroot.	Tobacco (Cured Leaf).	Coffee.	Hay (All Kinds).	VINES.	Grapes Gathered.	Bananas.	Pineapples.	Oranges.							
	Barley.				Potatoes.				Cotton.		Sugar-Cane Crushed.																			
	Wheat.	Oats.	Malting.	Other.	Maize.	Rye.	Rice.	English.	Sweet.	Cotton.	Sugar-Cane Crushed.	Sugar-Cane Crushed.																		
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Lb.	Acres.	Tons.	Tons.	Cwt.	Lb.	Tons.	Lb.	Bunches.	Dozens.	Dozens.										
<i>SOUTHERN. East of Main Range.</i>																														
Beaudesert	...	...	...	...	31,706	...	...	77	113	332	...	...	...	...	...	597	4,700	...	...	...										
Biggenden	...	...	3	...	3,962	...	...	3	8	21	...	...	...	...	...	54	3,764	...	...	5,800										
Brisbane	...	...	46	...	3,197	...	...	35	631	749	...	...	...	...	...	200	347,365	22,922	132,465	19,070										
Bundaberg	...	...	...	...	23,073	...	...	33	165	54	7,144	40,693	...	...	...	211	27,870	610	1,340	4,060										
Caboolture	...	...	...	...	11,608	...	...	106	240	7	...	...	...	...	...	13	4,260	...	2,480	8,660										
Childers	...	...	...	...	35,011	...	...	15	123	5	3,689	19,443	...	...	...	88	9,232	386	100	1,620										
Cleveland	...	...	...	...	129	...	...	4	81	54	...	...	...	...	...	5	25,519	2,653	16,313	10,000										
Crow's Nest (part of)	84	16	...	...	28,600	...	...	259	339	...	...	...	...	...	...	82	3,920	...	1,300	...										
Dugandan	...	4	...	33	39,130	4	...	62	5	281	...	...	...	...	...	928	14,970	180	73	652										
Eidsvold	...	...	...	...	736	...	...	3	...	...	...	...	...	...	...	15	4,800	...	...	...										
Esk	...	...	...	...	13,684	...	...	30	41	110	...	...	...	...	...	224	4,202	...	...	900										
Gatton	43	241	...	...	55,493	28	...	302	200	585	...	...	...	...	...	3,888	182,012	...	...	50,340										
Gayndah	34	...	...	...	166	...	...	1	12	3	...	...	...	...	...	15	1,400	...	...	4,000										
Gin Gin	60	...	...	...	13,645	...	...	9	113	42	1,061	2,192	...	...	...	122	8,204	...	...	...										
Goodna	...	...	...	...	972	...	...	10	...	22	...	...	...	...	...	71	4,000	...	...	200										
Gympie	...	...	...	...	21,925	...	...	81	66	28	...	...	...	...	...	276	25,310	100	50	39,886										
Harrissville	...	...	12	9,067	6	...	...	17	32	61	...	...	...	...	...	1,436	19,640	...	...	...										
Ipswich	...	...	...	...	9,518	...	...	59	15	20	...	...	...	...	...	1,030	8,142	...	13	2,221										
Laidley	...	...	...	...	52,103	...	...	26	23	257	...	...	...	...	...	4,199	51,470	...	...	...										
Logan	...	...	...	...	16,607	...	12	84	445	83	213	2,260	105	...	...	105	64,100	37,640	31,179	36,826										
Marburg	...	...	...	...	33,678	...	...	2	4	14	...	...	...	...	...	118	18,300	850	230	120										
Maroochy	...	...	...	...	18,775	...	...	71	150	73	328	2,890	100	...	...	14,873	112	17,252	77,407	30,408										
Maryborough	...	...	...	...	1,999	...	...	14	130	32	118	925	...	...	...	514	72	37,602	25,980	7,685										
Nanango	...	...	...	...	31,951	...	...	44	5	291	...	...	...	...	...	100	4,356	...	...	...										
Nerang	...	12	...	...	59,078	...	...	357	192	488	15	236	632	...	...	253	42,472	60	1,120	100,212										
Redcliffe	...	...	5	...	22,320	...	...	113	96	412	...	...	...	...	...	376	19,480	18,790	6,320	8,220										
Rosewood	...	...	...	...	17,245	...	...	12	26	40	...	...	...	...	...	493	150,610	...	...	...										
South Brisbane	...	5	...	...	1,088	...	...	24	294	18	...	...	...	...	...	302	186,307	...	1,457	12,940										
Taroom	...	...	...	...	30	...	...	...	28	...	...	...	...	...	...	1	75	...	...	100										
Tenningering	...	...	...	...	28,213	...	...	44	11	41	243	1,335	...	...	...	157	12,000	120	1,020	8,700										
Tiaro	...	...	...	...	4,693	...	...	56	42	86	...	...	24	...	...	83	58,400	...	...	700										
Woodford	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...										
Total East	221	281	46	45	588,802	38	12	1,953	3,291	4,548	...	12,811	69,974	861	...	15,387	15,643	1,363,074	187,648	232,253	770,754									
<i>West of Main Range.</i>																														
Adavale	...	24	...	...	100	34,735	...	...	10	...	42	...	...	...	...	...	333	44,492	...	...	250									
Allora	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...									
Augathella	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5,850	1,000	...	...	310									
Bollon	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37	7,180	...	...	...									
Charleville	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	86	...	...	...	...									
Condamine	...	...	...	...	15,975	...	...	83	...	168	...	...	...	...	...	...	25	7,348	...	...	...									
Crow's Nest (part of)	86	...	...	168	...	...	...	...	...	...	...	...	...	...	...	...	142	4,250	...	...	380									
Cunnamulla	60	...	...	...	1,842	...	...	4	...	42	...	...	...	...	...	521	46,610	...	...	5,500										
Dalby	344	...	...	...	...	...	...	...	...	...	...	...	...	...	...	140	...	...	...	...										
Diamantina (part of)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	24	450	...	...									
Eulo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	479	9,400	...	...									
Goondiwindi	216	22	95	...	37,058	32	...	113	...	5	...	...	...	...	...	...	...	8,120	...	...	...									
Highfields	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...									
Hungerford	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...									
Inglewood	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...									
Killarney	1,177	57	608	11	46,475	32	...	61	...	158	...	...	...	...	...	...	...	...	...	...	...									
Mitchell	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...									

Table No. XI.—continued.

PETTY SESSIONS DISTRICTS.	QUANTITY OF PRODUCE.																															
	GRAIN CROPS.								POTATOES.		Pumpkins and Melons.		Cotton.		SUGAR-CANE.		Arrowroot.		Tobacco (Cured Leaf).		Coffee.		Hay (All Kinds).		VINES.		BANANAS.		PINEAPPLES.		ORANGES.	
	Barley.				Maize.		Rye.		Rice.		English.		Sweet.																			
	Wheat.	Oats.	Malting.	Other.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Tons.	Lb.	Acres.	Tons.	Tons.	Cwt.	Lb.	Tons.	Lb.	Bunches.	Dozens.	Dozens.	Dozens.							
SOUTHERN. <i>West of Main Range—continued.</i>	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Tons.																			
Roma .....	32	...	...	...	...	4	...	...	...	...	1	...	4	4	...	...	...	...	...	...	186,044	...	...	...	...							
St. George .....	...	...	...	...	...	...	...	...	...	...	7	...	4	7	...	...	...	...	24	7,614	...	...	...	5,400								
Southwood .....	...	...	...	...	...	...	...	...	...	...	866	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
Stanthorpe .....	420	...	...	...	...	...	...	...	...	...	73	...	...	38	...	...	...	...	...	...	147	31,526	...	...	...							
Surat .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
Tambo .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...							
Texas .....	100	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	79	...	...	...	...							
Thargomindah .....	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	6,400	...	...	380							
Toowoomba .....	40	...	360	48	31,294	16	...	...	...	...	39	1	75	...	...	...	...	...	...	...	1,094	301,719	...	760								
Warwick .....	3,433	120	640	1,474	49,845	...	...	...	...	...	190	...	84	...	...	...	...	...	...	...	2,702	188,726	...	220								
Windorah (part of) .....	...	...	...	...	...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	700	...	...	...	...							
Total West .....	5,932	199	1,703	1,801	218,518	80	...	...	594	5	661	...	...	...	...	...	...	1,818	...	5,834	859,429	...	...	13,800								
Total Southern Division .....	6,153	480	1,749	1,846	807,320	118	12	2,547	3,296	5,209	...	12,811	69,974	861	1,818	15,387	21,477	2,222,503	187,648	232,253	784,554	...	...	...								
CENTRAL. <i>East of Main Range.</i>																																
Banana .....	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...								
Clermont .....	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...	...	...	...	...	710	...	...	...	1,650							
Emerald .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3,640	...	...	1,000								
Gladstone .....	40	...	...	...	3,144	...	...	...	4	13	11	...	...	...	...	...	...	...	31	2,850	...	506	2,780									
Mackay (Nebo collection) .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	960	...	...	960									
Mount Morgan .....	...	...	...	...	...	90	...	...	...	34	50	33	...	...	...	...	...	...	3	912	...	30	350									
Rockhampton .....	...	...	...	...	...	2,302	...	...	...	75	...	1	...	...	...	...	...	1,200	151	14,790	3,006	1,985	19,636									
St. Lawrence .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	100	...	...	...									
Springsure .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	520	...	...	...	...									
Total East .....	...	40	...	...	5,611	...	...	39	89	51	...	...	...	...	...	...	...	1,200	191	24,482	3,006	2,521	26,376									
West of Main Range.																																
Alpha .....	...	...	...	...	...	...	...	...	...	...	1	2	2	...	...	...	...	...	...	...	...	...	...	...								
Aramac .....	...	...	...	...	...	...	25	...	...	3	5	5	...	...	...	...	...	...	...	3,220	...	...	...	1,000								
Barcaldine .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	175	10,650	...	...	1,400										
Blackall .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...								
Dianantina (part of) .....	...	...	...	...	...	...	...	...	...	...	6	...	...	...	...	...	...	...	...	...	2,400	...	...	...								
Isisford .....	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...								
Longreach .....	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	500								
Muttaburra .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12	...	...	...	...	200								
Windorah (part of) .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...								
Total West .....	...	...	...	...	25	...	...	13	7	7	...	...	...	...	...	...	...	...	187	16,270	...	...	3,100									
Total Central Division .....	...	40	...	...	5,636	...	...	52	96	58	...	...	...	...	...	...	...	1,200	378	40,752	3,006	2,521	29,476									

Table No. XI.—*continued.*

PETTY SESSIONS DISTRICTS.	QUANTITY OF PRODUCE.																																					
	GRAIN CROPS.								POTATOES.				SUGAR-CANE.				VINES.			FRUIT.																		
	Wheat.		Oats.		Barley.		Maize.		Rye.		Rice.		English.		Sweet.		Pumpkins and Melons.		Cotton.		Sugar-Cane Crushed.		Arrowroot.		Tobacco (Chred Leaf).		Coffee.		Hay (All Kinds).		Grapes Gathered.		Bananas.		Pineapples.		Oranges.	
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Tons.	Lb.	Acre.	Tons.	Tons.	Cwt.	Lb.	Tons.	Lb.	Bunches.	Dozens.	Dozens.	Dozens.	Dozens.	Dozens.	Dozens.	Dozens.	Dozens.										
<i>NORTHERN.</i>																																						
<i>East of Coast Range.</i>																																						
Ayr	...	...	...	...	...	...	6,014	...	...	6	227	187	...	3,156	49,996	...	...	48	...	50	30	600	...	...	...	...	...	...										
Bowen	...	...	...	...	...	...	3,090	...	...	35	46	22	...	1,314	17,849	...	...	7	...	...	...	...	83,926	...	...	...	...	...	...									
Cairns	...	...	...	...	...	...	75,494	...	482	34	204	40	1,600	6,669	100,520	...	...	62,027	13	...	248,663	18,620	38,000	...	...	...	...	...	...									
Cardwell	...	...	...	...	...	...	3,354	...	...	4	605	...	...	...	...	...	...	...	...	...	1,210	...	83,110	...	...	...	...	...	...									
Cook	...	...	...	...	...	...	3,510	...	...	63	...	200	62	...	...	...	...	...	2,140	3	...	7,936	2,930	21,664	...	...	...	...	...	...								
Douglas	...	...	...	...	...	...	5,953	...	440	...	127	...	...	3,810	52,756	...	...	6,520	...	480	250	55,154	...	...	...	...	...	...	...									
Herberton (part of)	...	...	...	...	...	...	92,992	...	...	64	137	126	...	8,902	126,552	...	...	2,707	945	4,900	1,650	50	22,139	...	...	...	...	...	...									
Ingham	...	...	...	...	...	...	5,238	...	...	25	617	...	...	16,369	147,113	...	...	5,200	256	8,100	3,845	410	4,300	...	...	...	...	...	...									
Mackay (less Nebo collection)	...	12	...	...	...	...	16,020	120	...	201	938	159	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7,305										
Mareeba	...	...	...	...	...	...	2,152	...	...	7	22	8	...	...	...	...	...	200	8	...	1,500	250	100	...	...	...	...	...	...									
Mourilyan	...	...	...	...	...	...	1,600	...	96	10	394	...	...	6,071	77,167	600	...	17,920	...	...	694,405	2,000	12,833	...	...	...	...	...	...									
Somerset	...	...	...	...	...	...	150	...	...	...	95	14	...	...	...	...	...	...	...	...	8,390	210	20	...	...	...	...	...	...									
Townsville	...	...	...	...	...	...	960	...	...	230	51	140	...	...	...	...	...	...	...	2	1,600	...	184	540	...	...	...	...	...	...								
Total East	...	12	...	...	...	...	216,527	120	1,081	616	3,663	758	1,600	46,291	571,953	600	...	96,714	1,282	14,600	968,129	24,934	329,691	...	...	...	...	...	...									
<i>West of Coast Range.</i>																																						
Boulia	...	...	...	...	...	...	...	...	...	6	6	8	...	...	...	...	...	...	...	...	200	100	650	...	...	...	...	...	...									
Burke	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	200	100	650	...	...	...	...	...	...								
Camoooweal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...								
Cape River	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	3,337	...	7,546	...	...	...	...	...	27,800								
Charters Towers	...	...	...	...	...	...	...	...	...	...	2	...	1	...	...	...	...	...	...	...	672	...	...	...	...	...	...	...	...	...								
Cloncurry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	60	105	2,200	...	...	...	...	...	...								
Croydon	...	...	...	...	...	...	465	...	...	17	13	10	...	...	...	...	...	...	4	...	60	60	20	1,135	...	...	...	...	...	...								
Etheridge	...	...	...	...	...	...	80	...	...	17	13	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...								
Herberton	...	...	...	...	...	...	...	...	...	...	10	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...								
Hughenden	...	...	...	...	...	...	240	...	...	3	1	2	...	...	...	...	...	...	...	...	500	...	...	3,040	...	...	...	...	...	...								
Norman	...	...	...	...	...	...	1,718	...	...	2	44	6	...	...	...	...	...	...	...	...	...	230	42	200	...	...	...	...	...	...								
Palmer	...	...	...	...	...	...	1,330	...	...	10	20	5	...	...	...	...	...	...	...	...	562	371	3,600	...	...	...	...	...	...									
Ravenswood	...	...	...	...	...	...	13	...	...	2	2	13	...	...	...	...	...	...	...	40	...	120	98	260	...	...	...	...	...	...								
Thornborough	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,040	...	750	...	...	...	...	...	...									
Total West	...	12	...	...	...	...	3,846	...	...	42	110	62	...	...	...	...	...	...	...	44	6,549	1,232	736	47,521	...	...	...	...	...	...								
Total Northern Division	...	12	...	...	...	...	220,373	120	1,081	658	3,773	820	1,600	46,291	571,953	600	...	96,714	1,326	21,149	969,361	25,670	377,212	...	...	...	...	...	...									
Grand Total, 1902	...	6,165	520	1,749	1,846	1,033,329	2,569,118	238	1,093	3,257	7,165	6,087	1,600	59,102	641,927	1,461	1,818	113,301	23,181	2,284,404	1,160,015	260,444	1,191,242	...	...	...	...	...	...									
" " 1901	...	1,692,222	42,208	193,538	83,499	5,000	22,402	17,128	5,222	56,297	...	78,160	1,180,091	4,069	5,848	130,293	122,039	4,063,109	2,313,719	359,717	1,880,264	...	...	...	...	...	...											
Increase in 1902	...	1,686,057	41,688	191,789	81,653	1,535,789	4,762	4,129	19,145	9,963	50,210	1,600	19,058	538,164	2,608	4,030	16,992	98,858	1,778,705	1,153,704	99,273	689,022	...	...	...	...	...	...										
Decrease in 1902	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...									

SHOWING the TOTAL EXTENT of LAND under CULTIVATION, and the AREA under each DESCRIPTION of CROP in QUEENSLAND—RETURN for TEN YEARS.

AREA UNDER EACH DESCRIPTION OF CROP.

Year.	Land under Cultivation.		Land in Fallow.		Land under Crop.										HAY CROPS.										VINES.										Gardens and Orchards.	
					GRAIN CROPS.	POTATOES.	HAY CROPS.	VINES.	Wheat.	Oats.	Barley.	Rye.	Lucerne.	Panicle-cum.	Other.	Lucerne and Other Green Forage.	For Wine-making.	For Table Use.	Not yet Bearing.	Bananas.	Pineapples.	Oranges.	Other Crops.													
	Acres.	Acres.	Acres.	Acres.	Wheat.	Oats.	Barley.	Maize.	Rye.	Rice.	English.	Sweet.	Cotton.	Sugar-Cane.	Arrowroot.	Tobacco.	Coffee.	Pumpkins and Melons.	Wheat.	Oats.	Barley.	Rye.	Lucerne.	Panicle-cum.	Other.	Lucerne and Other Green Forage.	For Wine-making.	For Table Use.	Not yet Bearing.	Bananas.	Pineapples.	Oranges.	Other Crops.	Gardens and Orchards.		
1893	252,075	8,826	243,249	28,993	606	...	495	93,556	496	789	8,306	2,997	191	59,251	192	475	...	2,417	9,943	236	313	8,443	1,025	128	13,336	645	975	380	2,423	803	1,630	1,320	2,885			
1894	284,552	9,570	274,982	28,937	1,477	...	1,418	103,671	283	650	10,523	2,775	100	71,818	282	915	...	4,643	10,993	195	319	10,228	1,490	160	12,029	605	1,062	320	3,075	819	1,672	1,434	3,029			
1895	299,278	13,950	285,310	27,090	922	...	721	100,481	202	716	9,240	2,736	494	77,247	194	1,061	60	...	1,344	9,763	221	410	14,315	2,411	145	19,552	1,782*	239	3,916	847	1,900	4,121	3,189			
1896	336,775	14,097	322,678	35,581	1,881	...	1,122	115,715	345	600	7,672	3,131	280	83,093	309	994	138	...	4,865	11,565	252	427	17,592	3,673	80	19,509	1,842	178	4,477	823	1,791	3,875	3,308			
1897	386,259	14,402	371,857	59,585	1,834	...	2,077	109,721	470	445	8,197	3,581	48	98,611	391	755	311	...	5,895	14,002	291	702	23,362	3,791	174	19,503	1,881	286	4,858	909	2,196	3,410	3,578			
1898	449,287	46,033	363,254	46,219	299	...	1,112	108,835	863	7,961	6,396	1	110,657	455	617	432	...	4,764	9,358	152	483	20,095	2,411	100	26,580	1,727	293	5,294	1,130	2,272	1,615	3,501				
1899	455,645	34,899	420,746	52,527	714	6,011	1,463	110,489	198	319	10,766	3,919	...	110,657	431	745	495	10,167	26,047	10,997	620	486	19,091	1,628	35	11,514	1,746	257	5,802	939	2,514	3,761				
1900	480,372	22,979	455,397	385	6,392	1,231	127,174	271	271	11,049	1,000	...	110,657	401	655	537	14,232	8,919	1,167	310	502	3,448	1,020	33	41,445	1,734	285	6,215	1,165	3,151	3,587					
1901	507,317	23,857	482,460	1,555	6,818	4,957	116,983	246	205	3,390	3,390	...	112,051	399	768	547	14,448	9,719	17,167	310	502	3,448	1,020	33	41,445	1,734	289	5,772	1,020	3,083	3,434					
1902	478,121	202,738	275,383	1,880	78	163	497	80,923	22	38	2,829	1,847	8	85,338	296	722	396	2,573	867	2,619	50	122	15,213	1,142	55	51,279	1,302	257	5,266	1,101	3,141	3,004				

a Not specially returned prior to 1898.

\* These can no longer be kept separate.

SHOWING the GROSS PRODUCE of PRINCIPAL CROPS Raised in QUEENSLAND—RETURN for TEN YEARS.

QUANTITY OF PRODUCE.

Year.	GRAIN CROPS.										HAY.										VINES.										Gardens and Orchards.							
	Wheat.	Oats.	Malt-ing.	Barley.	Maize.	Rye.	Rice.	English Potatoes.	Sweet Potatoes.	Cotton.	Sugar-Cane.	Sugar.	Arrowroot (Commercial).	Tobacco (Cured Leaf).	Coffee.	Pumpkins and Melons.	Wheat.	Oats.	Barley.	Rye.	Lucerne.	Panicum.	Other.	Wine Made.	Grapes for Table Use.	Bananas.	Pineapples.	Oranges.	Other Crops.	Gardens and Orchards.								
1893	Bshls. 413,094	Bshls. 12,095	Bshls. ...	Bshls. 8,396	Bshls. 1,844,108	Bshls. 9,479	Bshls. 32,043	Tons. 17,65	Tons. 12,640	Tons. 29,353	Tons. 43,670	Tons. 76,116	Tons. 448,737	Tons. 4,577	Lb. 9,571	Cwt. 2,820	Tons. 17,831	Tons. 452	Tons. 18,734	Tons. 1,715	Tons. 304	Gallons. 101,528	2,081,854	10,591,396	343,773	2,663,211	Total Wine made from a portion of the Grapes returned in the adjoining column.	Lb. 176,497	Dozens. 3,160,580	8,928,025	686,135	2,048,919						
1894	545,185	30,463	...	37,824	2,684,925	5,251	24,866	28,185	14,203	+54,801	49,839	91,712	534,687	9,571	...	6,362	20,300	336	617	25,236	2,615	230	...	All Grapes gathered.	...	...	...	...	...	...	...	...	...	...				
1895	123,630	10,887	...	7,756	2,391,378	4,169	19,245	19,027	14,233	+269,110	55,771	86,255	1,289	7,511	14,060	...	1,344	12,498	372	944	30,835	4,662	226	...	...	...	...	...	...	...	...	...	...					
1896	601,254	32,181	...	19,340	3,085,333	7,449	20,525	18,451	14,322	+141,032	66,640	100,774	2,603	8,629	9,707	...	1,689	17,836	501	717	41,799	7,017	136	170,733	...	...	...	...	...	...	...	...	...	...	...			
1897	1,009,293	31,496	...	49,340	2,803,172	8,329	12,990	17,466	+19,977	65,432	5,788	5,703	81,614	2,424	548	1,871	...	7,829	5,454	871	52,827	6,745	285	207,945	4,822,941	16,484,604	351,524	1,624,176	...	...	...	...	...	...	...	...	...	...
1898	607,012	4,047	7,948	2,262,481	3,874	38,183	16,413	20,069	+60,917	82,391	163,734	6,116	3,276	5,655	23,370	2,424	16,179	249	4,108	4,108	134,334	4,657,090	46,547,090	4,116,218	1,527,469	3,131,045	3,230,627	36,301,735	401,692	1,420,839	...	...						
1899	614,414	10,712	100,027	18,416	1,965,598	2,391	9,275	22,075	19,899	...	79,435	123,249	4,669	6,551	104,981	38,040	33,891	22,212	742	919	42,594	2,836	215	...	...	...	...	...	...	...	...	...	...					
1900	1,194,085	7,555	107,910	19,234	2,456,647	1,928	6,570	18,200	...	72,651	848,338	4,419	4,032	102,134	43,740	9,337	20,052	681	1,093	45,606	1,912	77	132,459	...	3,634,949	2,321,108	4,063,109	2,333,719	359,717	1,880,264	...	...	...	...	...			
1901	1,192,222	42,208	193,538	83,538	2,569,118	5,000	5,222	22,402	17,128	+1,600	51,102	1,180	1,093	3,257	7,165	1,093	1,049	6087	1,049	1,049	16,146	1,714	89	100,852	2,284,404	1,160,015	260,444	1,191,212	...	...	...	...	...	...	...	...	...	...

\* Not specially returned in previous years.

+ Unginned.

Table No. XIV.

## AVERAGE PRODUCE PER ACRE OF PRINCIPAL CROPS IN QUEENSLAND—RETURN FOR TEN YEARS.

Year.	Wheat Grain.	Oats Grain.	BARLEY.				Maize.	Rye Grain.	Rice.	English Potatoes.	Sweet Potatoes.	Cotton.	Sugar (on Acres Crushed).	Arrowroot (Commercial).	Tobacco (Cured Leaf).	COFFEE.			Wheat (Hay).	Oats (Hay).	Barley (Hay).	Rye (Hay).	Lucerne (Hay).	Panicum (Hay).	Other (Hay).	Wine.	Grapes for Table Use.	Bananas.	Pineapples.	Oranges.
			Malting.	Other.	Tons.	Lb.										On Pro- ductive Area.	Pumpkins and Melons.													
1893 ...	14.25	19.96	...	16.96	19.50	19.11	40.61	2.07	4.22	*154	1.74	2,337	9.64	...	...	1.17	1.79	1.92	1.59	2.22	1.67	2.38	157.41	2,135	4,371	428	1,634			
1894 ...	18.80	20.62	...	26.67	25.90	18.55	38.26	2.68	5.12	+548	1.84	1,896	10.46	...	...	1.37	1.85	1.72	1.93	2.47	1.76	1.44	291.73	2,976	2,903	838	1,225			
1895 ...	4.56	11.81	...	10.76	23.80	20.64	26.88	2.06	5.20	+545	1.55	(Tubers.) Tons.	6.65	7.08	§234	...	1.06	1.28	1.68	2.30	2.15	1.93	1.56	2,387	...	3,795	445	1,050		
1896 ...	16.78	17.10	...	17.24	26.49	21.59	34.21	2.40	4.57	+504	1.51	8.42	8.68	373	...	0.92	1.54	1.78	1.68	2.34	1.91	1.70	2,780	...	3,810	381	753			
1897 ...	16.86	17.17	...	24.00	25.55	17.72	29.19	2.26	4.88	+416	1.50	7.39	7.55	453	...	1.33	1.77	1.88	1.98	2.26	1.78	1.64	2,564	...	3,416	387	741			
1898 ...	13.13	14.93	13.78	8.02	21.90	12.96	44.19	2.06	5.43	+50	1.99	13.44	5.31	284	3.07	0.91	1.73	1.64	1.80	2.30	1.70	2.11	2,383	...	8,843	410	672			
1899 ...	11.70	15.00	16.64	12.59	17.79	12.08	29.08	2.11	5.08	...	1.55	10.83	8.79	470	3.74	1.30	2.02	1.20	1.89	2.23	1.74	3.07	1,850	...	6,257	404	611			
1900 ...	15.06	20.40	17.12	15.62	19.20	12.77	25.35	1.81	5.04	...	11.68	11.02	6.06	361	3.07	1.16	1.75	1.48	1.84	2.19	1.75	2.33	2,096	Bunches, 373	452	998				
1901 ...	19.40	27.50	28.39	16.84	21.96	20.33	25.47	2.25	5.05	...	15.10	10.20	7.61	352	3.90	1.55	2.12	1.94	1.94	1.96	1.80	4.00	2,403	...	401	353	969			
1902 ...	3.28	6.67	10.73	6.91	11.49	10.82	28.76	1.12	3.88	+200	10.86	4.94	2.52	361	2.37	1.21	1.49	1.20	1.70	1.06	1.50	1.62	1,755	...	220	237	571			

♦ Ginned.

† Unginned.

§ On total area.

‡ The manufacture of wine by the purchasers of the grapes and not the growers has now attained such proportions that the returns can no longer be kept distinct.

Table No. XV.

SHOWING the AREA and PRODUCE Obtained during the Year 1902 from "OTHER CROPS," details of which are not included in the GENERAL TABLE.

LOCALITY.		OTHER FRUITS.												OTHER VEGETABLES.												OTHER MISCELLANEOUS CROPS.															
		Bushels.				Bushels.				Bushels.				Bushels.				Bushels.				Bushels.				Bushels.				Bushels.				Bushels.							
South—																																									
East of Main Range																																									
West of Main Range																																									
Central—																																									
East of Main Range																																									
West of Main Range																																									
Northern—																																									
East of Coast Range																																									
West of Coast Range																																									
Total Area ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
South—																																									
East of Main Range																																									
West of Main Range																																									
Central—																																									
East of Main Range																																									
West of Main Range																																									
Northern—																																									
East of Coast Range																																									
West of Coast Range																																									
Total Produce ...	...	8	9,165	1,460	73	12,900	221	60	29,530	6,244	257,138	2,161	220	3,537	125,220	191	373	1,775	424	12,714	4,872	100,920	44,485	1,036	1,215	22,649	85	74	16,742	19,488	7	20	93	32	48	44	831	1,080			

Table No. XVI.

RETURN showing the TOTAL EXTENT of LAND CULTIVATED for HAY, together with the YIELD of HAY, and the average yield per ACRE in each of the several PETTY SESSIONS DISTRICTS of the STATE of QUEENSLAND, during the Year 1902.

PETTY SESSIONS DISTRICTS.	HAY.															
	Wheat.		Oats.		Barley.		Rye.		Lucerne.		Panicum.		Other Sown Grasses.		Total of all Kinds.	
	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.
SOUTHERN. <i>East of Main Range.</i>																
Beaudesert ... ...	2	3	87	154	...	...	...	...	316	370	36	70	...	...	441	597
Brisbane ... ...	...	...	98	114	...	...	...	...	50	68	14	17	1	1	163	200
Bundaberg ... ...	...	...	45	72	...	...	...	...	130	125	18	14	...	...	193	211
Dugandan ... ...	22	75	61	131	3	10	13	28	244	495	78	189	...	...	421	928
Esk ... ...	...	...	59	36	...	...	...	...	175	162	17	26	...	...	251	224
Gatton ... ...	136	203	144	257	5	12	60	114	1,985	2,941	212	342	14	19	2,556	3,888
Gympie ... ...	...	...	145	77	...	...	...	...	64	69	94	127	3	3	306	276
Harrisville ... ...	...	...	96	224	...	...	...	...	715	895	189	317	...	...	1,000	1,436
Ipswich ... ...	...	...	105	213	...	...	...	...	563	785	14	32	...	...	682	1,030
Laidley ... ...	25	22	33	64	...	...	17	31	3,414	3,957	85	125	...	...	3,574	4,199
Nerang ... ...	5	11	118	133	...	...	7	7	51	64	21	38	...	...	202	253
Redcliffe ... ...	...	...	82	175	...	...	...	...	95	171	19	30	...	...	196	376
Rosewood ... ...	14	21	62	88	...	...	...	...	219	319	51	63	1	2	347	493
South Brisbane ... ...	...	...	32	46	...	...	...	...	203	151	142	104	1	1	378	302
Tiaro ... ...	...	...	44	92	...	...	5	9	37	38	19	18	...	...	105	157
All other Districts ... ...	44	57	348	572	15	16	2	3	243	303	88	113	10	9	750	1,073
Total East ... ...	248	392	1,559	2,448	23	38	104	192	8,504	10,913	1,097	1,625	30	35	11,565	15,643
Average yield per acre (tons)	1.58		1.57		1.65		1.85		1.28		1.48		1.17		1.35	
West of Main Range.																
Allora ... ...	...	...	42	45	...	...	...	...	408	288	...	...	...	...	450	333
Goondiwindi ... ...	199	139	...	...	...	...	5	3	...	...	...	...	...	...	204	142
Highfields ... ...	63	100	65	76	...	...	9	7	408	338	...	...	...	...	545	521
Hungerford ... ...	76	105	20	20	...	...	...	...	5	15	...	...	...	...	101	140
Killarney ... ...	3	1	22	17	...	...	...	...	410	461	...	...	...	...	435	479
Stanthorpe ... ...	55	54	55	49	1	2	...	...	68	42	...	...	...	...	179	147
Toowoomba ... ...	26	20	91	118	2	1	3	4	1,342	875	21	76	...	...	1,485	1,094
Warwick ... ...	36	20	51	42	20	10	...	...	3,668	2,630	...	...	...	...	3,775	2,702
All other Districts ... ...	101	110	11	15	3	7	...	...	128	144	...	...	...	...	243	276
Total West ... ...	559	549	357	382	26	20	17	14	6,437	4,793	21	76	...	...	7,417	5,834
Average yield per acre (tons)	0.98		1.07		0.77		0.82		0.74		3.62		...	...	0.79	
Total Southern Division	807	941	1,916	2,830	49	58	121	206	14,941	15,706	1,118	1,701	30	35	18,982	21,477
Average yield per acre (tons)	1.17		1.48		1.18		1.70		1.05		1.52		1.17		1.13	
CENTRAL.																
Rockhampton ... ...	...	...	144	51	...	...	...	...	140	93	19	7	...	...	303	151
Barcaldine ... ...	36	71	71	102	...	...	1	2	...	...	...	...	...	...	108	175
All other districts ... ...	6	9	18	30	...	...	...	...	18	13	...	...	...	...	42	52
Total Central Division ...	42	80	233	183	...	...	1	2	158	106	19	7	...	...	453	378
Average yield per acre (tons)	1.90		0.79		...		2.00		0.67		0.37		...	...	0.83	
NORTHERN.																
Herberton (part of) ... ...	17	24	306	586	1	2	...	...	113	333	...	...	...	...	437	945
Mackay (less Nebo collection) ... ...	1	4	124	246	...	...	...	...	...	...	5	6	1	6	126	256
All other districts ... ...	...	...	40	70	...	...	...	...	1	1	5	6	24	48	70	125
Total Northern Division	18	28	470	902	1	2	...	...	114	334	5	6	25	54	633	1,326
Average yield per acre (tons)	1.56		1.92		2.00		...		2.93		1.20		2.16		2.09	
Grand Total { 1902 ...	867	1,049	2,619	3,915	50	60	122	208	15,213	16,146	1,142	1,714	55	89	20,068	23,181
1901 ...	9,719	15,096	17,167	36,321	310	600	502	972	34,177	66,888	1,165	2,102	15	60	63,055	122,039
Increase in 1902 ...	...	...	...	...	...	...	...	...	...	...	...	...	40	29	...	...
Decrease in 1902 ...	8,852	14,047	14,548	32,406	260	540	380	764	18,964	50,742	23	388	...	...	42,987	98,858
Average yield per acre (tons)	1.21		1.49		1.20		1.70		1.06		1.50		1.62		1.16	

Table No. XVII.

RETURN showing the TOTAL EXTENT of LAND CULTIVATED for GREEN CROPS in each of the several PETTY SESSIONS DISTRICTS of the STATE during the Year 1902.

Table No. XVIII.

## AVERAGE YIELD PER ACRE OF CROPS.

Division.	Description.	GRAIN CROPS.								POTATOES.		Sugar-cane (to Acres Crushed)	Cotton.	Arrow-root (Tuber).	Tobacco, Dried Leaf.	Coffee.	Pumpkins and Melons.	Hay of all Kinds.	Grapes.	Bananas.	Pine-apples.	Oranges.			
		Wheat.	Oats.	Barley, Malting.	Barley, Other.	Maize.	Rice.	Rye.	English.	Sweet.															
SOUTHERN	East of Main Range	9.61	6.69	23.00	15.00	11.73	4.00	9.50	1.02	3.65	5.46	...	3.50	...	285	2.36	1.35	1,893	127	252	622				
	West of Main Range	3.20	5.85	10.58	6.82	7.36	...	6.15	0.98	1.67	...	...	...	2.52	...	2.01	0.79	1,927	...	...	189				
	Total Southern	3.27	6.32	10.73	6.91	10.10	4.00	6.94	1.01	3.64	5.46	...	3.50	2.52	285	2.31	1.13	1,906	127	252	598				
CENTRAL	East of Main Range	20.00	...	...	...	13.08	...	...	0.76	2.87	...	...	...	...	400	1.11	0.57	258	376	70	197				
	West of Main Range	...	...	...	...	25.00	...	...	1.86	1.00	...	...	...	...	...	...	1.40	1.61	1,627	...	...	620			
	Total Central	20.00	...	...	...	13.11	...	...	0.90	2.53	...	...	...	...	400	1.14	0.83	388	376	70	212				
NORTHERN	East of Main Range	12.00	...	...	...	23.66	30.89	24.00	2.10	4.39	12.36	200	12.00	...	376	3.32	2.11	1,460	257	185	594				
	West of Main Range	...	...	...	...	8.68	...	...	1.45	1.57	...	...	...	...	...	1.51	1.83	312	95	74	609				
	Total Northern	12.00	...	...	...	22.97	30.89	24.00	2.04	4.17	12.36	200	12.00	...	376	3.05	2.09	682	256	177	596				
TOTAL STATE FOR 1902		3.28	6.67	10.73	6.91	11.49	28.76	10.82	1.12	3.88	10.86	200	4.94	2.52	361	2.37	1.16	1,755	220	237	571				
"	1901	19.40	27.50	28.39	16.84	21.96	25.47	20.33	2.25	5.05	15.10	...	10.20	7.61	352	3.90	1.94	2,403	401	353	969				

Price 1s. 7d.]

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